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1898



THE  
MERCHANT & CO.,  
INCORPORATED

PHILADELPHIA

NEW YORK  
BROOKLYN  
CHICAGO...

LIBRARY OF CONGRESS.

Chap. .... Copyright No. ....

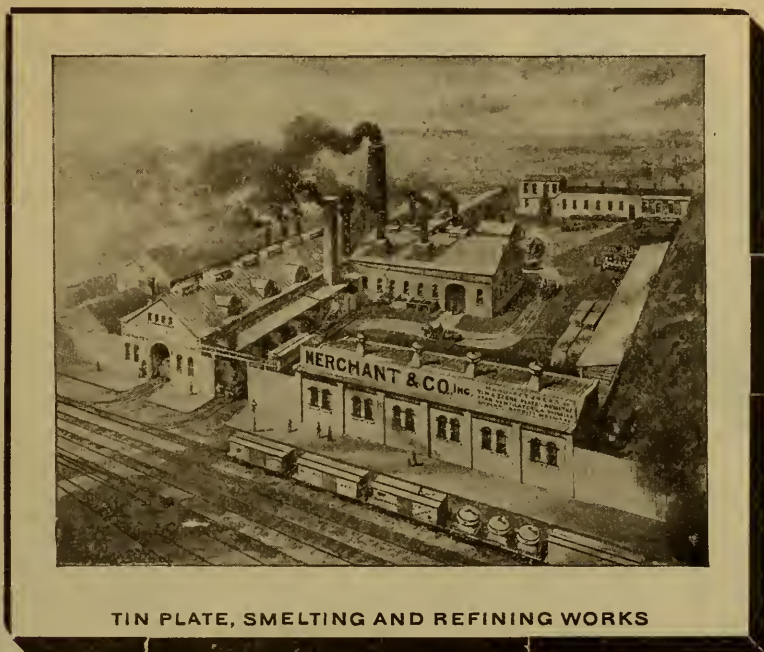
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UNITED STATES OF AMERICA.

ILLUSTRATED  
CATALOGUE and PRICE LIST.  
...1898...

✓  
11  
Merchant & Co., Inc.



MANUFACTURERS OF

High Grade Roofing Plates      Extra Quality Bright Plates

Solders, Babbitt and Mixed Metals

“STAR” ★ Ventilators      “GOTHIC” Shingles

Metal “SPANISH” Tiles

OFFICES AND WAREHOUSES

PHILADELPHIA,

NEW YORK,

517 Arch & 512 Cherry Sts.

245-247 Water St.

BROOKLYN,

584 Flushing Ave.

CHICAGO,

36 La Salle St.

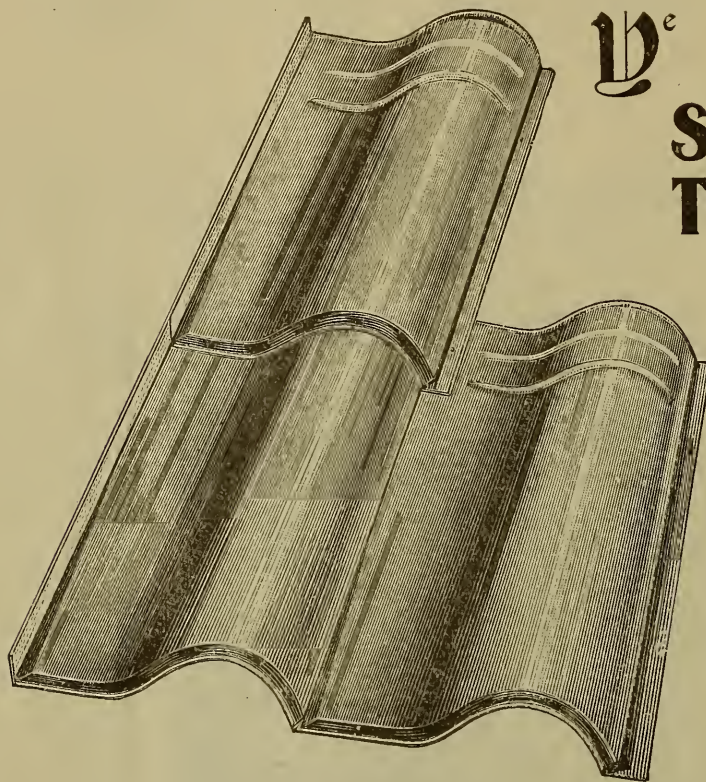
WORKS, WASHINGTON AVE., PHILADELPHIA, PA.



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July 27. 98

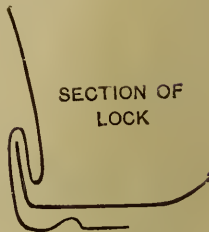




Patented December 6, 1892.  
General View of Interlocking "Spanish" Tile.

**W<sup>e</sup>**   
**Spanish**  
**Tile . . .**

SECTION OF  
LOCK



**H**AVING in mind the ornamental as well as the useful in the best of Roofing Materials, we are offering improvements that will be of benefit to all who may be interested in the subject.

Terra Cotta Tiles have been used and known for ages, and made in many shapes, undoubtedly the most artistic being that which is known as the "Spanish."

Terra Cotta Tiles have, however, many and serious disadvantages. They are very heavy and their great weight makes it necessary to proportionately strengthen the entire roof sub-structure; it is well known that they are easily broken, become detached and the cemented joints, yielding to the influence of the weather, crack and open, making channels through which a storm easily works its way.

13656

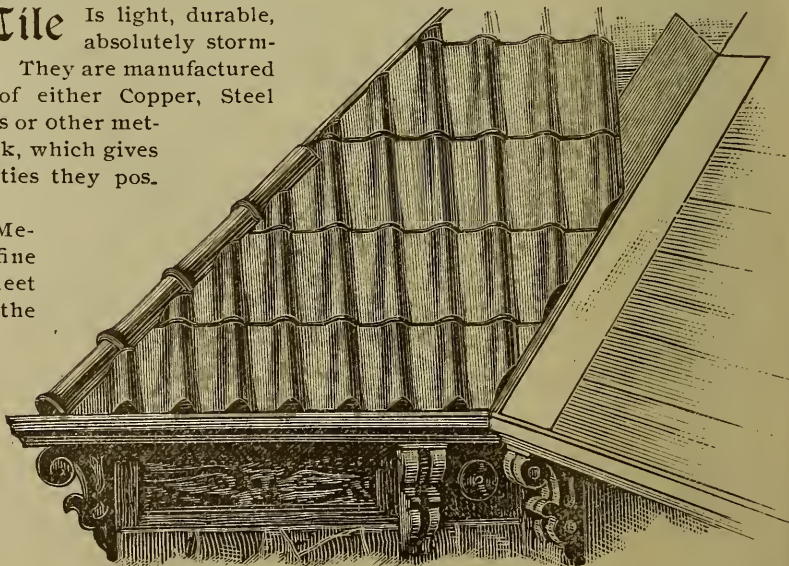
Our "Spanish" Tile is made of Sheet Metal  
and is Superior to the Terra Cotta Tile,

Possessing its characteristic form and artistic beauty, but having none of its disadvantages.

**Our Metallic Tile** Is light, durable, absolutely storm-proof, and easily adjusted. They are manufactured by us, (under Patent) of either Copper, Steel (galvanized), Terne Plates or other metals with a vertical side lock, which gives them the valuable properties they possess for roofing purposes.

It is safe to say that our Metallic Tile made from our fine grade of Cold Rolled Sheet Copper, will not only make the *handsomest* and most artistic of roofs, but absolutely the *best* roof known.

OVER ONE MILLION  
SQUARE FEET  
...NOW IN USE...



Section showing application of Valley Tiles.

99-384



*There are 174 tiles in one square (100 square feet), and the weight per square—say of 16 oz. copper, is not over 200 lbs. for 10x14 size; whereas a square of the Terra Cotta tile weighs from 750 to 800 lbs.*



Owing to fluctuations of market on Sheet Copper, special prices on Copper Tiles named on application . . . . .



PENNSYLVANIA R. R. STATION, 23D ST., NEW YORK, WHERE OUR COPPER TILES ARE IN USE.

We are prepared to furnish with Spanish Tiles all necessary Ridge Cresting, Hips, Eave "Starters", etc., which will give a roof a neat finish and to suit all circumstances.

We will name special prices for "Spanish" Tiles, made of our **HIGH GRADE ROOFING PLATES**, on application.

These tiles are securely packed in boxes, and when made of Tin, our price includes painting both sides.

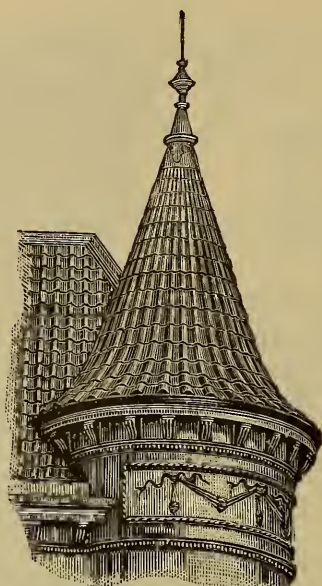
One-half more roof timber is required for a structure where clay tiles are used than for copper. This is an important item for consideration in the cost of a building.

**The BEST is always the CHEAPEST.**

## Merchant's Graduated Tiles

(Spanish Pattern)

Saves 50 per cent. in material, and more in labor of laying. Does not involve waste by trimming in putting on.



Patented January 3, 1894.

for  
Circular Roofs,  
Domes  
and  
Bell-Shaped Towers,  
Turrets  
and all  
Conical Surfaces

The only Metal Tile  
made for this class  
of work

There are few buildings being erected that do not have one or more towers upon them and no feature of the *modern* building adds more to its architectural beauty than a graceful and well-proportioned tower. Yet in their construction a difficult problem has invariably arisen as to a suitable covering—especially for *conical towers*, for which there has been nothing in the market adaptable, the only available covering being wood shingles, which split when drawn to the convex form of a tower. Slate from the same cause will break and metal shingles of forms designed for straight roofing involve a waste of just fifty per cent. of materials in fitting to cones, and greater waste of time in putting on, as after the first course each succeeding one has to be reduced in size, and practically made over by the roofer.



The manufacturing is now done at the factory, and not by the roofer on the roof.



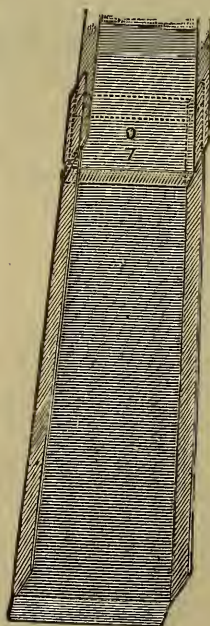
## Locks

It will be noticed that in both our Graduated and Regular "Spanish" Tile, the locks are so constructed that the water cannot enter them, but is carried *from* instead of *to* the lock. In this feature they differ, and are superior to all others.



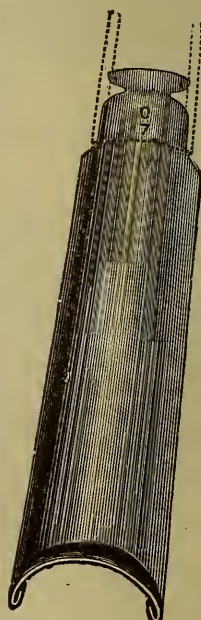
No. 2.

Graduated Flat Tile, with but one edge turned.



No. 3.

Graduated Flat Tile, with both edges turned ready for nailing between wood strips; also section of adjoining course.



No. 4.

Graduated Round Tile, for covering wood strips, dotted line indicating next tile above.



“TEN IN ONE.”

# Merchant's Metal Spanish Tiles.

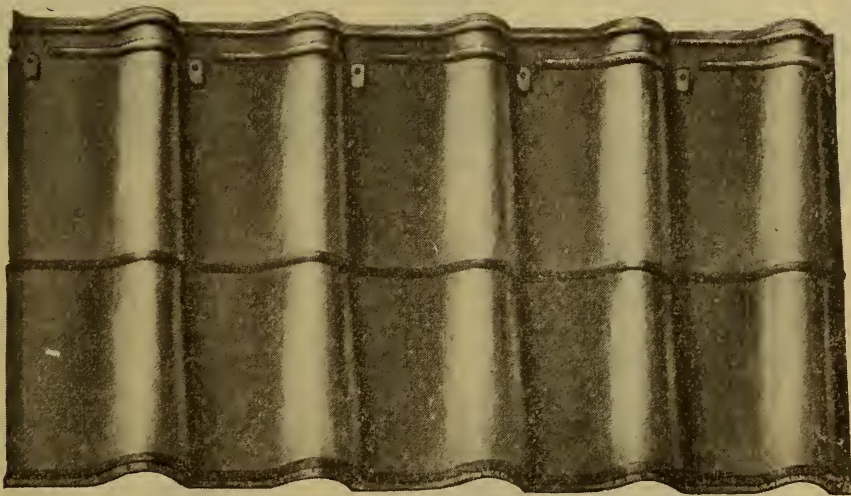
One Sheet Stamped into Ten Tiles.

Copper

Terne Plates

Galvanized Steel

Zinc



It is a well known fact that we were the originators of Metal “Spanish” Tiles with *storm proof lock*, the excellence of which is proven by the large quantities supplied during the past years.

We hold letters patent on the *only storm-proof lock* which has been found effective, formed in the curved part of the tile, which turns the water from the lock. This limits *imitators* to a lock in the *flat portion of the tile*, where it would naturally be *flooded* in every rain storm and leakage is inevitable. The system of treatment as in corrugated iron with side over-lap, such as our “*Ten in One*,” is superior to a flat lock. While we do not consider the light sheets will make as tight a roof as our *Interlocking Tiles*, at the same time we manufacture them for those who prefer this pattern, which shows ten figures in each sheet. The upper end of the underlying Tile has securely riveted thereto heavy cleats, which secures the lower edge of the Tile above, which being independent of nails, makes a most valuable feature in this class of Tile.

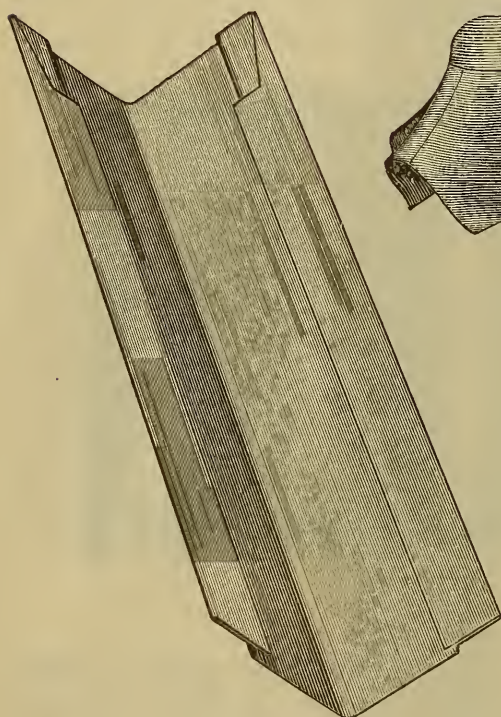


# Ridge

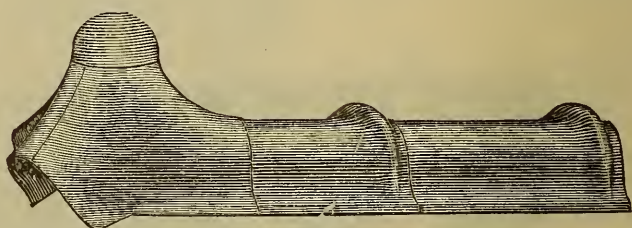
...and...

# Hip Tiles

also  
**Terminals,**  
 for Hips, Gables  
 and Dormers.



*Fig. 3*

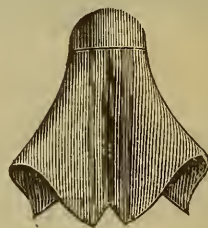


*Fig 1*

FIG. 1.—Ridge (or Hip) Tile and Terminal.

FIG. 2.—Hip Terminal made suitable for 10 x 14 or 14 x 20 size of Spanish Tile.

FIG. 3.—Special Valley for "Gothic" pattern or other shingles.



*Fig 2*

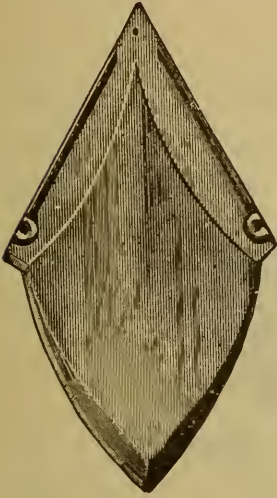


Union Station, Dallas, Texas, Roofed with our Metal Spanish Tiles.

# “Gothic” and “Diamond” Tiles

for Siding or Roofing.

(GOTHIC PATTERN.)



Tin, Copper or . . . .

. . . . Galvanized Steel

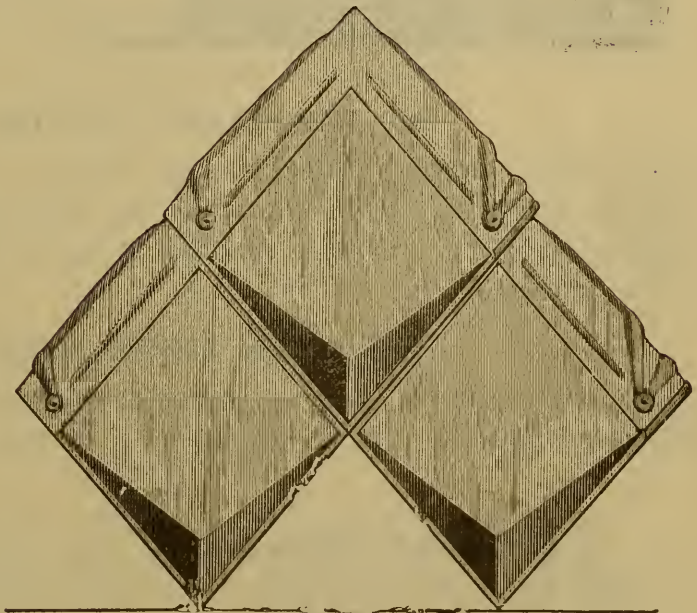


Each Tile covers 6 by 6 in. 400 cover a Square of 100 square feet.

Gross weight, 85 lbs. per square.



(DIAMOND PATTERN.)



PRICE LIST,  
(Painted).

Diamond,” made of  
1 C Charcoal Tin, at  
\$8.25 per square.

“Gothic,” made of 1  
C Charcoal Tin, at  
\$8.50 per square.

Discount, per sq.

Patented April 12, 1892.

for Small Roofs, Mansards, Bulkheads, Gables, Etc.

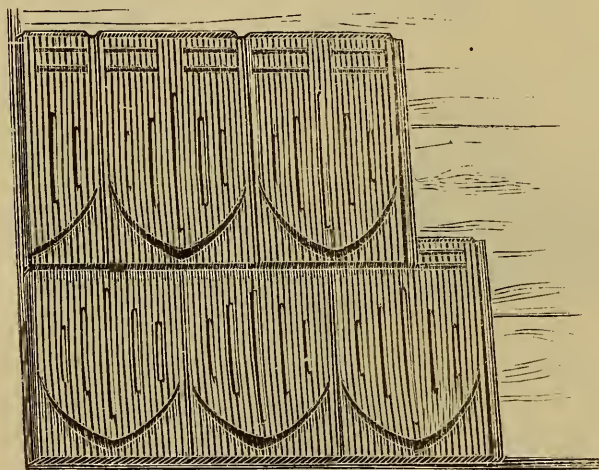
In ordering, if you will give us the length of eave or base course we will cut the right amount for first course. The points cut off will work along the top. No extra charge.

## MERCHANT'S

# "Gothic" Shingle

is designed expressly to meet a requirement amongst Architects, Builders, and others who have discarded the *ordinary* Tin Shingles

on account of the absence of ornamentation and bold appearance, such as we have endeavored to make prominent in



**This  
... Shingle ...**

avoiding the monotony of *flat* Shingles or Slates

### AN IMPORTANT FEATURE

in our new "**Gothic**" Shingle aside from the storm-proof lock, is that the sheets are first *crimped*, giving the Shingles strength and rigidity, as well as the ornamentation possessed by no other Shingle on the market.

### WE HAVE THREE SIZES

viz: 7 x 10", 10 x 14" and 14 x 20", manufactured of Copper and Tin (Roofing Plates) of various grades; also of Galvanized Steel.

The "**Gothic**" Shingle is easily laid, and the construction of the side-lock is such that every allowance is made for expansion and contraction of the metal, and is absolutely storm-proof.

**... NO NAILS EXPOSED AND NO SOLDER USED ...**

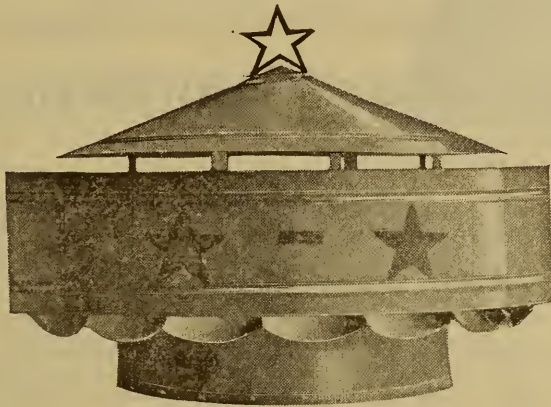
A thoroughly practical, and economic system of Roofing.

*Prices Named on Application.*



# THE "STAR" ★ VENTILATOR

Has an efficiency that is well known to Architects, Engineers, prominent Builders and others throughout the country. It is used also by the United States Government, in the various engineering departments, on account of its superiority.



PATENTED MARCH 30, 1886

Made of either Galvanized Iron, Copper or Brass in all sizes to suit all conditions and to meet every requirement.

For Ventilation of

Churches

School Houses

Public Buildings

Residences

Power Houses

Locomotive Round Houses

Cotton and

Woolen Mills

Carpet and Paper Mills

Foundries, Dye Houses

Morocco Factories

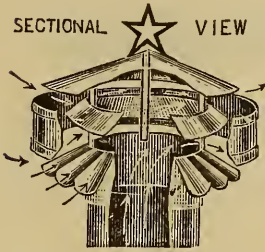
Railway Cars

Ferry Boats, etc.

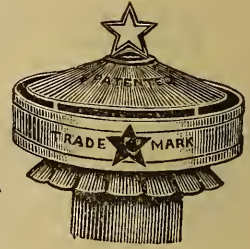
## Price List.

2 inch. . . . .	\$1 00	10 inch . . . . .	\$ 5 75	24 inch . . . . .	\$40 00
2½ " . . . . .	1 00	11 " . . . . .	6 20	26 " . . . . .	50 00
3 " . . . . .	1 50	12 " . . . . .	6 75	28 " . . . . .	56 00
3½ " . . . . .	1 50	13 " . . . . .	9 00	30 " . . . . .	65 00
4 " . . . . .	1 75	14 " . . . . .	13 00	32 " . . . . .	80 00
4½ " . . . . .	2 00	15 " . . . . .	16 00	34 " . . . . .	100 00
5 " . . . . .	2 50	16 " . . . . .	20 00	36 " . . . . .	120 00
5½ " . . . . .	2 85	17 " . . . . .	23 00	40 " . . . . .	180 00
6 " . . . . .	3 40	18 " . . . . .	27 00	44 " . . . . .	200 00
7 " . . . . .	4 00	19 " . . . . .	30 00	48 " . . . . .	240 00
8 " . . . . .	4 65	20 " . . . . .	33 00	54 " . . . . .	300 00
9 " . . . . .	5 20	22 " . . . . .	36 00	60 " . . . . .	360 00

DISCOUNT UPON APPLICATION.



*We here  
submit a table*



**Showing the Capacity of the Different Sizes of  
the "Star" Ventilator.**

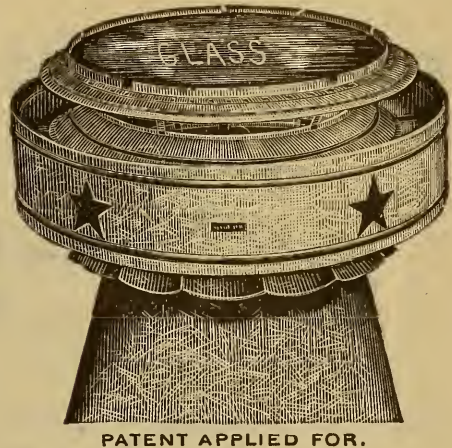
<i>Diameter.</i>	<i>Capacity.</i>	<i>Diameter.</i>	<i>Capacity.</i>
2 inches	4 sq. inches	10 inches	78 sq. inches
2½ "	6 "	12 "	113 "
3 "	7 "	14 "	154 "
3½ "	9 "	16 "	201 "
4 "	12 "	18 "	254 "
4½ "	16 "	20 "	314 "
5 "	19 "	24 "	452 "
5½ "	24 "	30 "	507 "
6 "	28 "	36 "	1018 "
7 "	38 "	40 "	1256 "
8 "	50 "	48 "	1809 "
9 "	63 "	60 "	2827 "

The "Star" Ventilator, owing to its construction, has a greater exhaust or ventilating area than any other Ventilator of the same diameter, and is absolutely storm proof. The Ventilator, however, must necessarily have as great a capacity as the flue or opening upon which it is placed. For instance if a flue measures 8 x 12 inches inside diameter, nothing less than a 10-inch Ventilator should be used.

Where a chimney has more than one flue a separate ventilator for each is advisable. While two or more flues may be covered with a large base, yet a separate pipe should be made for each flue, making them independent of each other, and thereby preventing gas or smoke entering one from the other.

**MERCHANT'S  
Combination  
Skylight  
"Star"  
Ventilator**

Absolutely Storm-proof and  
Effective.



This Ventilator and Skylight is constructed so as to embody all the essential principles required to make a strictly first-class and reliable Ventilator. Light being the important feature, the diameter of the circular glass top is one-fourth greater than the diameter of the shaft of the Ventilator. The area of light is therefore increased about 55 per cent.

In providing this additional area, and by the use of heavy glass securely set in a frame constructed in a rigid manner, glass breakage is reduced to a minimum and fully accommodates the diagonal rays of light penetrating through the additional surface of glass. The inside flange is constructed on a proportionately larger basis, thereby necessitating heavier materials when made up for **Skylight** use than for the regular Ventilator. Every allowance is made for condensation.

The metal top **Star Ventilator** has always **ventilated thoroughly**. The introduction of the Skylight feature sacrifices none of its ventilating qualities. The full capacity of ventilation is given without interference with the **light**.

**THE ONLY DIFFERENCE** between the **Combination Skylight "STAR" Ventilator** and the original metal-top **"STAR"** is in the glass top. The general construction is the same. The thickness of glass varies with the size of the Ventilator, and provision for shedding water, snow, etc., has been made.

Something of this sort has been needed in numerous cases and Architects and Builders will at once recognize in the new Ventilator a valuable improvement over the old system. **HYGIENIC PRINCIPLES** demand **light** as well as **air**, and the combination of perfect ventilation with plenty of light has thus been provided for, and the usual care in manufacture, superiority of material and general excellence of the original **"STAR" Ventilator** is assured.

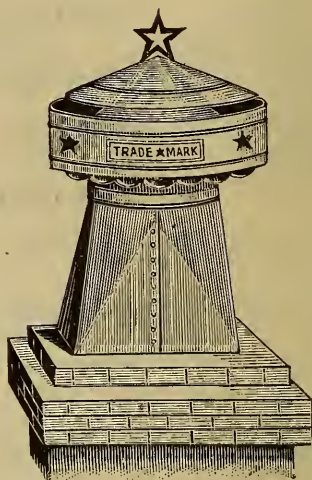
**PRICES ON APPLICATION.**



# B A S E S

FOR

## Chimney Ventilators.



There are two plans of attaching the "Star" Ventilator to a chimney, both of which are thoroughly practical. They are also economical and durable. These bases are of heavy galvanized sheet iron, and made to fit closely to the chimney, with either an inside or outside flange. The box attachments are securely riveted.

The base with outside flange is made to fit over the entire chimney, making it impossible for rain, snow or dampness to get on the inside of the flue. The inside flange is quite as effective.

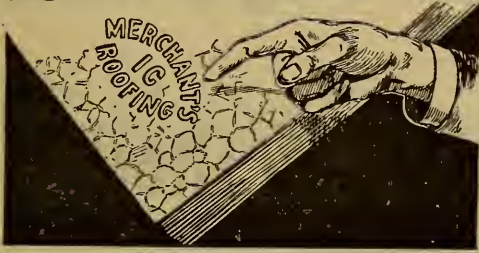
Great care should be used in measurements, to insure good results.

Bases can be made to fit any roof or chimney, either square or oblong. The price of the base is *extra*, according to size and quantity.

We furnish dampers, if wanted, thereby regulating the draught.

Send for our "Star Ventilator" book.

# On each Sheet of Merchant's High Grade Roofing Plates



There are letters stamped in the centre so you can plainly read the name of the brand and thickness of the plate.



That much you can *see*, but what you *can't see* is most important of all, it is that

## Merchant's Best Plates . . .

are Coated by the Palm Oil Process,

which is the only way to make good roofing tin.

The duty of the roof is to keep out the rain. It will perform this duty if you use

## MERCHANT'S

## PALM OIL HIGH GRADE

## ROOFING PLATES

and take care of it. Just how long a roof made of acid plates will last no one can say. Sometimes it will keep out the rain for three or four years, and sometimes it will leak inside of twelve months.

When you receive our plates you will find that each sheet is absolutely perfect. If you detect the slightest defect, we will replace the sheet at our expense.

# High Grade Roofing Plates

---

## “Merchant’s Old Method”

This brand is accepted by the United States Government and the leading architects, as *the best terne plate produced*.

The Steel is of the finest and softest quality, and will stand the most severe tests.

The sheets are coated by the Palm Oil Process only.

Extra heavily coated, the metal evenly and uniformly distributed over the entire sheet.

Stamped with brand and thickness, resquared, and carefully assorted. **No Wasters.**

---

## “Merchant’s Roofing”

*is SUPERIOR to any Brand in the Market  
except “MERCHANT’S OLD METHOD.”*

### POINTS OF MERIT:

Soft, very ductile Steel Body.

Made by the Palm Oil Process only.

Uniformly and very heavily coated, no beaded edges or irregularities.

Stamped with brand and thickness.

Each sheet resquared and perfect.

**No Wasters.**

---

## “American Old Style”

is made by the Palm Oil Process, and is heavily coated.

The sheets are resquared, stamped with the brand and thickness, and finely assorted. **No Wasters.**

---

WE WILL NAME SPECIAL PRICES ON APPLICATION.



# High Grade Roofing Plates

## **“Alaska” and “Camaret”**

**Strictly Palm Oil Process.**

The most popular brands of extra coated High Grade Roofing Plates in the market. Always of uniform quality. Each sheet resquared, stamped with the brand and thickness and perfectly assorted. NO WASTERS.

## THE **“EMLYN”** BRAND ROOFING PLATES

Having special arrangements with the former makers of this justly celebrated brand, we offer to the trade the

### **“EMLYN” Brand of Roofing Plates**

Resquared. Each sheet stamped with the brand and thickness. This plate is made by the PALM OIL PROCESS exclusively, no Acid Flux being used. It is an excellent plate.

# Good Grade Roofing Plates

**“Hickory”** Good Coating.

**“Empire”** Good Coating.

**“Palm”** Fair Coating.



The above three brands are resquared, stamped with the brand and thickness, and can be furnished of Prime or Waster quality.

**We will name Special Prices on Application.**

## ...Two Object Lessons...

The strength of a chain depends on its weakest link.

*The life and value of a roofing plate depends on the thinnest coated part.*

The value of **MERCHANT'S** roofing tin is in the process and uniformity of coating, and

### The Entire Absence of Acid Flux.

#### OBJECT LESSON, NO. 1.

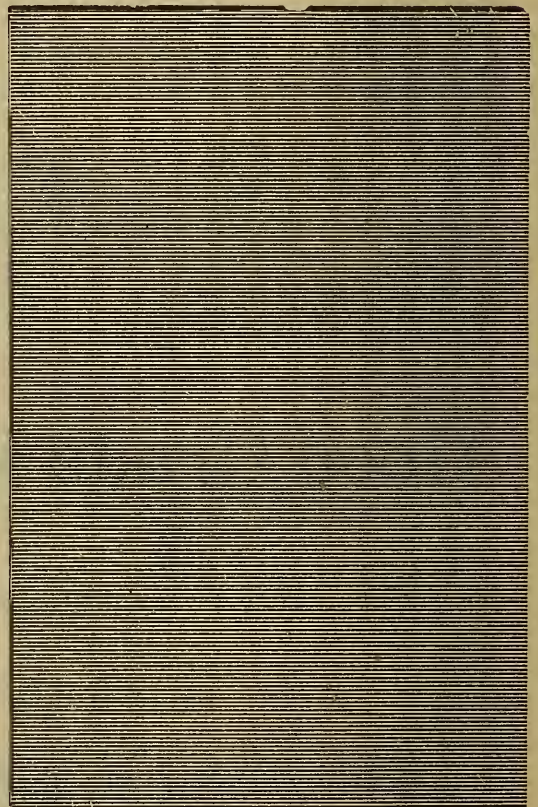
Showing Old Process.



Showing the unevenness of coating on a sheet of "old style" Roofing Tin made by a process claimed superior to sheets thoroughly coated in all parts alike.

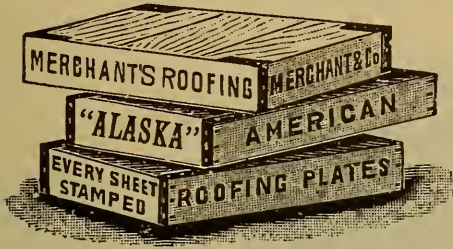
#### OBJECT LESSON, NO. 2.

Showing Our Process.



Showing the regular uniformity of coating on our High Grade roofing plates, made by the *Palm Oil Process*.

# A Good Hard Rain and A Cheap Tin Roof



**CAN** teach more practical lessons in two hours, against buying hidden holes, than a barrel of literature could in twelve months . . . . .

## A HOLE \_\_\_\_\_

that attends strictly to business for sixty minutes can cause more expense than the roof would cost if covered with the finest tin in the world. *And these holes cannot be seen in the buying.*

### Cheap Tin is Made by a Cheap, Quick Process,

using VERY STRONG ACID. This acid lies concealed in the very pores of the steel. It is active, disintegrating, destructive; forms rust, weakens resistance, bores holes—and here the trouble begins. This takes but a few months.

On SEPTEMBER 23, 1895...

## The United States Government

broadly distributed specifications for Roofing Tin to be placed on the new GOVERNMENT PRINTING OFFICE, as follows:

“The United States desires only the best quality of dipped roofing plates, and samples showing surface imperfections, or irregularities in size, weight or shape will be rejected. Comparative tests will be made for weight, ductility, uniformity of plates, and thickness and quality of coating; all of which, as well as prices, will be considered in awarding the contract.

“Each bid must be accompanied by a full sample box, and must state the brand and average net weight per box of the roofing plates offered. No quantity less than a full box will be received as a sample and unsuccessful bidders can remove their samples as soon as contract is awarded.”

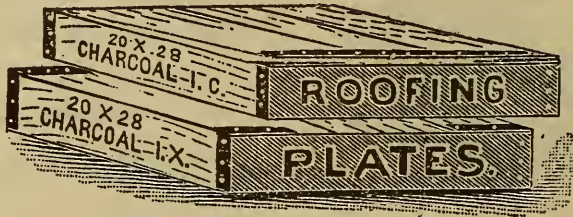
*Under these rigid specifications, examination and tests were made by a committee who awarded the contract to*

**Merchant & Co.,**  
INCORPORATED

Large stocks always carried in Philadelphia, Chicago, New York, Boston, Denver and Brooklyn.



# Regular Grade Roofing Tin



To meet the demand for a regular grade of Roofing Plates, we offer you the following brands, which are of good working quality and nicely coated:

## “ELSIE”

Dark, Oil Finish, Stamped.

## “KISMET”

Dark, Oil Finish, Not Stamped.

## “STANLEY”

Bright, Dry Finish, Stamped.

## “ARCH”

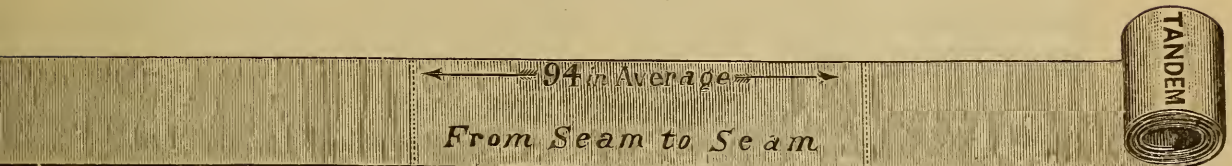
Bright, Dry Finish, Not Stamped.



We can furnish the above plates of Prime, Unassorted and Waster quality ; light, medium or full weight, 20x28 and 14x20 size. The plates have given the very best satisfaction for a medium quality of tin.

# CONTINUOUS ROOFING TIN.

## "TANDEM"



### SIZES.

It is made in three sizes, 14", 20" and 28" wide, each strip of 20" and 28" contains one hundred square feet surface. 14" contains 50 square feet to each strip, and is packed two strips in each roll.

### QUALITIES.

It is made in I. C. and I. X. thickness.

1st Quality Tandem "Old Style."

2d " " Extra

3d " " Worcester Grade.

It is painted on one side, if desired, with pure Metallic Paint and Linseed Oil

### PRICES ON APPLICATION

## ROOFING PLATES IN ROLLS.



## WE CAN FURNISH YOU

<b>Weights</b>	190 Lbs., 200 lbs., also IC full weight and IX full weight thickness.	<b>Widths</b>	14" wide by 36' long 20" wide by 60' long 28" wide by 43' long
<b>Quality</b>	WASTER or PRIME; except HIGH GRADE which is of PRIME quality only.	<b>Lengths</b>	
<b>Grade</b>	LIGHT, MEDIUM, HEAVY or EXTRA HEAVILY COATED.	<b>Seams</b>	CROSS LOCK seams soldered by hand EDGES perfectly straight.
<b>Process and Finish</b>	HIGH GRADE plates of PALM OIL process only. Others of dark oil finish, or bright, dry finish.	<b>Courses</b>	
		<b>Painting</b>	PAINTED on one or both sides, when so ordered.

We respectfully caution the trade to avoid quotations that do not definitely specify the weight and quality of the tin offered.

## COST OF TIN ROOFING.

The following table shows the cost per square and per square foot of tin roofing, laid with 14 x 20 tin, with tin at any price from \$4 to \$10 per box. The first column contains the price per box of tin; the second column shows the cost of tin per square (100 square feet) of surface, and the third column shows the cost of tin per square foot of surface.

### FLAT SEAM ROOFING.

#### COST WITH 14 x 20 TIN.

#### COST WITH 20 x 28 TIN.

Price of Tin per box	Cost per sq. of flat roof 14 x 20 Tin	Cost per sq. foot.	Price of Tin per box	Cost per sq. of flat roof 14 x 20 Tin	Cost per sq. foot.	Price of Tin per box	Cost per sq. of flat roof 20 x 28 Tin	Cost per sq. foot.	Price of Tin per box	Cost per sq. of flat roof 20 x 28 Tin	Cost per sq. foot.
\$4.25	\$2.21	.0221	\$8.25	\$4.29	.0429	\$8.00	\$2.01	.0201	\$16.00	\$4.01	.0401
4.50	2.34	.0234	8.50	4.42	.0442	8.50	2.13	.0213	16.50	4.13	.0413
4.75	2.47	.0247	8.75	4.55	.0455	9.00	2.26	.0226	17.00	4.26	.0426
5.00	2.60	.0260	9.00	4.68	.0468	9.50	2.38	.0238	17.50	4.38	.0438
5.25	2.73	.0273	9.25	4.81	.0481	10.00	2.51	.0251	18.00	4.51	.0451
5.50	2.86	.0286	9.50	4.94	.0494	10.50	2.63	.0263	18.50	4.63	.0463
5.75	2.99	.0299	9.75	5.07	.0507	11.00	2.76	.0276	19.00	4.76	.0476
6.00	3.12	.0312	10.00	5.20	.0520	11.50	2.88	.0288	19.50	4.88	.0488
6.25	3.25	.0325	10.25	5.33	.0533	12.00	3.00	.0300	20.00	5.01	.0501
6.50	3.38	.0338	10.50	5.46	.0546	12.50	3.13	.0313	20.50	5.13	.0513
6.75	3.51	.0351	10.75	5.59	.0559	13.00	3.25	.0325	21.00	5.26	.0526
7.00	3.64	.0364	11.00	5.72	.0572	13.50	3.38	.0338	21.50	5.38	.0538
7.25	3.77	.0377	11.25	5.85	.0585	14.00	3.50	.0350	22.00	5.51	.0551
7.50	3.90	.0390	11.50	5.98	.0598	14.50	3.63	.0363	22.50	5.63	.0563
7.75	4.03	.0403	11.75	6.11	.0611	15.00	3.75	.0375	23.00	5.76	.0576
8.00	4.16	.0416	12.00	6.24	.0624	15.50	3.88	.0388			

### STANDING SEAM ROOFING.

#### COST WITH 14 x 20 TIN.

#### COST WITH 20 x 28 TIN.

Price of Tin per box	Cost per sq. of st'dg seam roof with 14 x 20 Tin	Cost per sq. foot.	Price of Tin per box	Cost per sq. of st'dg seam roof with 14 x 20 Tin	Cost per sq. foot.	Price of Tin per box	Cost per sq. of st'dg seam roof with 20 x 28 Tin	Cost per sq. foot.	Price of Tin per box	Cost per sq. of st'dg seam roof with 20 x 28 Tin	Cost per sq. foot.
\$4.25	\$2.37	.0237	\$7.25	\$4.03	.0403	\$8.00	\$2.15	.0215	\$16.50	\$4.42	.0442
4.50	2.51	.0251	7.50	4.17	.0417	8.50	2.28	.0228	17.00	4.56	.0456
4.75	2.65	.0265	7.75	4.31	.0431	9.00	2.41	.0241	17.50	4.69	.0469
5.00	2.79	.0279	8.00	4.45	.0445	9.50	2.55	.0255	18.00	4.82	.0482
5.25	2.93	.0293	8.25	4.59	.0459	10.00	2.68	.0268	18.50	4.96	.0496
5.50	3.06	.0306	8.50	4.73	.0473	10.50	2.82	.0282	19.00	5.09	.0509
5.75	3.20	.0320	8.75	4.87	.0487	11.00	2.95	.0295	19.50	5.23	.0523
6.00	3.34	.0334	9.00	5.01	.0501	11.50	3.09	.0309	20.00	5.36	.0536
6.25	3.48	.0348	9.25	5.15	.0515	12.00	3.21	.0321	20.50	5.49	.0549
6.50	3.62	.0362	9.50	5.29	.0529	12.50	3.35	.0335	21.00	5.63	.0563
6.75	3.76	.0376	9.75	5.43	.0543	13.00	3.48	.0348	21.50	5.76	.0576
7.00	3.90	.0390	10.00	5.57	.0557	13.50	3.62	.0362	22.00	5.90	.0590
						14.00	3.75	.0375	22.50	6.03	.0603
						14.50	3.89	.0389	23.00	6.17	.0617
						15.00	4.02	.0402	23.50	6.30	.0630
						15.50	4.15	.0415	24.00	6.43	.0643
						16.00	4.29	.0429			

Please note the above table of prices, showing the net cost of tin per square foot, also per 100 square feet—for material only.



# TIN ROOFERS' TABLES.

We give below four tables, which will be found of practical value by tinners in calculating the number of boxes of tin needed to cover a given area of roof.

14x20 Flat Seam Roofing.

Table showing the square feet of "flat seam" roof for any number of sheets of 14x20 tin plate from 1 to 1000; also showing the number of sheets of 14x20 tin plate required to lay any given "flat seam" roof varying in size from 2 feet to 1715 feet.

Size of tin, 14x20, edged, 13x19; sq. in. exposed 247; sheets per box, 112.

No. Sheets Square Feet	No. Sheets Square Feet	No. Sheets Square Feet	No. Sheets Square Feet	No. Sheets Square Feet
1..... 2	23.....39	45.....77	67..... 115	89..... 153
2..... 3	24.....41	46.....79	68..... 117	90..... 154
3..... 5	25.....43	47.....81	69..... 118	91..... 156
4..... 7	26.....45	48.....82	70..... 120	92..... 158
5..... 9	27.....46	49.....84	71..... 122	93..... 160
6.....10	28.....48	50.....86	72..... 124	94..... 161
7.....12	29.....50	51.....87	73..... 125	95..... 163
8.....14	30.....51	52.....89	74..... 127	96..... 165
9.....15	31.....53	53.....91	75..... 129	97..... 166
10.....17	32.....55	54.....93	76..... 130	98..... 168
11.....19	33.....57	55.....94	77..... 132	99..... 170
12.....21	34.....58	56.....96	78..... 134	100..... 172
13.....22	35.....60	57.....98	79..... 136	200..... 343
14.....24	36.....62	58.....99	80..... 137	300..... 515
15.....26	37.....63	59.....101	81..... 139	400..... 686
16.....27	38.....65	60.....103	82..... 141	500..... 858
17.....29	39.....67	61.....105	83..... 142	600.....1029
18.....31	40.....69	62.....106	84..... 144	700.....1201
19.....33	41.....70	63.....108	85..... 146	800.....1372
20.....34	42.....72	64.....110	86..... 148	900.....1544
21.....36	43.....74	65.....111	87..... 149	1000.....1715
22.....38	44.....75	66.....113	88..... 151	

14x20 Standing Seam Roof.

Table showing the square feet of "standing seam" roof for any number of sheets of 14x20 tin plate from 1 to 1000; also showing the number of sheets of 14x20 tin plates required to lay any given "standing seam" roof varying in size from 2 feet to 16,02 feet.

Size of tin, 14x20; exposed on roof, 13x17 $\frac{3}{4}$  sq. in. exposed, 230 $\frac{3}{4}$  sheets per box, 112.

No. Sheets Square Feet	No. Sheets Square Feet	No. Sheets Square Feet	No. Sheets Square Feet	No. Sheets Square Feet
1..... 2	23..... 37	45.....72	67..... 107	89..... 143
2..... 3	24.....38	46.....74	68..... 109	90..... 144
3..... 5	25.....40	47.....75	69..... 111	91..... 146
4..... 6	26.....42	48.....77	70..... 112	92..... 147
5..... 8	27.....43	49.....79	71..... 114	93..... 149
6.....10	28.....45	50.....80	72..... 115	94..... 151
7.....11	29.....46	51.....82	73..... 117	95..... 152
8.....13	30.....48	52.....83	74..... 119	96..... 154
9.....14	31.....50	53.....85	75..... 120	97..... 155
10.....16	32.....51	54.....87	76..... 121	98..... 157
11.....18	33.....53	55.....88	77..... 123	99..... 159
12.....19	34.....54	56.....90	78..... 125	100..... 160
13.....21	35.....56	57.....91	79..... 127	200..... 320
14.....22	36.....58	58.....93	80..... 128	300..... 481
15.....24	37.....59	59.....95	81..... 130	400..... 641
16.....26	38.....61	60.....96	82..... 131	500..... 801
17.....27	39.....62	61.....98	83..... 133	600..... 961
18.....29	40.....64	62.....99	84..... 135	700.....1122
19.....30	41.....66	63.....101	85..... 136	800.....1282
20.....32	42.....67	64.....103	86..... 138	900.....1442
21.....34	43.....69	65.....104	87..... 139	1000.....1602
22.....35	44.....71	66.....106	88..... 141	

20x28 Flat Seam Roofing.

Table showing the square feet of "flat seam" roof for any number of sheets of 20x28 tin plate from 1 to 1000; also showing the number of sheets of 20x28 tin plate required to lay any given "flat seam" roof varying in size from 4 feet to 3562 feet.

Size of tin, 20x28; edged, 27x19; sq. in. exposed, 513; sheets per box, 112.

No. Sheets Square Feet	No. Sheets Square Feet	No. Sheets Square Feet	No. Sheets Square Feet	No. Sheets Square Feet
1..... 4	23.....82	45.....160	67..... 239	89..... 317
2..... 7	24.....86	46.....164	68..... 242	90..... 321
3.....10	25.....89	47.....167	69..... 246	91..... 324
4.....14	26.....93	48.....171	70..... 249	92..... 328
5.....18	27.....96	49.....175	71..... 253	93..... 331
6.....21	28.....100	50.....178	72..... 256	94..... 335
7.....25	29.....103	51.....182	73..... 260	95..... 338
8.....29	30.....107	52.....185	74..... 264	96..... 342
9.....32	31.....110	53.....189	75..... 267	97..... 346
10.....36	32.....114	54.....192	76..... 271	98..... 349
11.....39	33.....118	55.....196	77..... 274	99..... 353
12.....43	34.....121	56.....199	78..... 278	100..... 356
13.....46	35.....125	57.....203	79..... 281	200..... 713
14.....50	36.....128	58.....207	80..... 285	300.....1069
15.....53	37.....132	59.....210	81..... 289	400.....1425
16.....57	38.....135	60.....214	82..... 292	500.....1781
17.....61	39.....139	61.....217	83..... 296	600.....2138
18.....64	40.....143	62.....221	84..... 299	700.....2494
19.....68	41.....146	63.....224	85..... 303	800.....2850
20.....71	42.....150	64.....228	86..... 306	900.....3206
21.....75	43.....153	65.....232	87..... 310	1000.....3562
22.....78	44.....157	66.....235	88..... 314	

20x28 Standing Seam Roofing.

Table showing the square feet of "standing seam" roof for any number of sheets of 20x28 tin plate from 1 to 1000; also showing the number of sheets of 20x28 tin plate required to lay any given "standing seam" roof varying in size from 3 feet to 3328 feet.

Size of tin, 20x28; exposed on roof, 20x17 $\frac{3}{4}$ ; sq. in. exposed, 479 $\frac{1}{2}$ ; sheets per box, 112.

No. Sheets Square Feet	No. Sheets Square Feet	No. Sheets Square Feet	No. Sheets Square Feet	No. Sheets Square Feet
1..... 3	23.....77	45.....150	67..... 223	89..... 296
2..... 7	24.....80	46.....153	68..... 226	90..... 300
3.....10	25.....83	47.....156	69..... 230	91..... 303
4.....13	26.....86	48.....160	70..... 233	92..... 306
5.....17	27.....90	49.....163	71..... 236	93..... 309
6.....20	28.....93	50.....166	72..... 240	94..... 313
7.....23	29.....96	51.....170	73..... 243	95..... 316
8.....27	30.....100	52.....173	74..... 246	96..... 319
9.....30	31.....103	53.....176	75..... 250	97..... 323
10.....33	32.....106	54.....180	76..... 253	98..... 326
11.....37	33.....110	55.....183	77..... 256	99..... 329
12.....40	34.....113	56.....186	78..... 259	100..... 333
13.....43	35.....116	57.....190	79..... 263	200..... 656
14.....47	36.....120	58.....193	80..... 266	300..... 998
15.....50	37.....123	59.....196	81..... 269	400.....1331
16.....53	38.....126	60.....200	82..... 273	500.....1664
17.....57	39.....130	61.....203	83..... 276	600.....1997
18.....60	40.....133	62.....206	84..... 280	700.....2330
19.....63	41.....136	63.....210	85..... 283	800.....2662
20.....67	42.....140	64.....213	86..... 286	900.....2995
21.....70	43.....143	65.....216	87..... 289	1000.....3328
22.....73	44.....146	66.....220	88..... 293	

# High Grade Bright Tins

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**THE DIFFERENCE** between "Charcoal" and "Coke" Bright tin is in the COATING, STEEL and ASSORTMENT. Some so-called "Charcoal" plates are made of common steel, are thinly coated and poorly assorted ; while others have a dull, lusterless appearance.

**YOU CANNOT MISTAKE** our "Charcoal" Bright Plates for an inferior grade. The finish is like highly polished silver. The surface has no black spots, blisters or other defects. The steel is soft and ductile.

Our Brands are "Palma" "Florence" and "Minerva" made of the finest quality of soft steel, coated with pure refined Australian Tin, and assorted with the utmost care.

## **"PALMA," Extra Charcoal**

*Finest Finish and Lustre ; Extra Heavily Coated.*

## **"FLORENCE," Charcoal**

*Strictly "Calland" or "Melyn" Grade ; High Finish, Heavily Coated,*

## **"MINERVA"**

*Medium "Charcoal" Bright Finish, Well Coated.*

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*The extreme care with which we assort our product insures not only extra fine Prime Plates but also an unusually good run of Wasters, which necessarily arise in the process of manufacture, and which we pack separately, and sell at a reduction in price.*

**ALL SIZES AND THICKNESSES.**

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# Regular Grade Bright Tins

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The following brands are of excellent working quality and very nicely coated :

**"VIOLET"** *Allaway Grade, Medium Charcoal Finish.*

**"ROSE"** *Best Coke Finish.*

**ALL SIZES AND WEIGHTS. LOW PRICES.**

# Bright Tin Plate.

We have in stock the following Plates specially adapted to the manufacture of Furnace Pipe:

IC and IX, 20 x 23, for 7 in. Pipe  
 IC and IX, 20 x 26, for 8 in. Pipe  
 IC and IX, 20 x 29 $\frac{1}{4}$ , for 9 in. Pipe  
 IC and IX, 20 x 32 $\frac{1}{2}$ , for 10 in. Pipe  
 IC and IX, 20 x 35 $\frac{3}{4}$ , for 11 in. Pipe  
 IC and IX, 20 x 38 $\frac{1}{2}$ , for 12 in. Pipe

One Piece, Boiler Size, Bright Tin, Heavily Coated, Charcoal Finish.

1X 14 x 56	2X 14 x 56
1X 14 x 60	2X 14 x 60

PRIME AND WASTER QUALITY.

We carry a full stock in....

## VARIOUS GRADES AND THICKNESSES

....of the following Square and Special Sizes

10 x 14	18 x 18	12 $\frac{1}{2}$ x 17	14 x 31
12 x 12	19 x 19	12 x 24	14 x 36
13 x 13	20 x 20	13 x 26	14 x 21
14 x 14	22 x 22	14 x 22	15 x 21
15 x 15	24 x 24	14 x 24	16 x 19
16 x 16	10 x 20	14 x 26	16 x 20
17 x 17	11 x 22	14 x 28	16 x 22
			17 x 25

and also have 14 x 20 and 20 x 28 sizes, from 80 lb. basis to DXXXX thickness.

WE SHALL BE PLEASED TO QUOTE SPECIAL PRICES ON APPLICATION.



## TAGGER'S TIN.

No. 38 Gauge, 14 x 20, Taggers Tin	@.....	per box, 225 sheets.
36    "        "        "	.....	"        180    "
38    "        20 x 28,    "	.....	"        225    "
36    "        "        "	.....	"        180    "

## TAGGER'S IRON.

No. 38 Gauge, 10 x 14, Taggers Iron	@.....	per box, 450 sheets.
36    "        "        "	.....	"        360    "
38    "        14 x 20,        "	.....	"        225    "
36    "        "        "	.....	"        180    "
38    "        20 x 28,        "	.....	"        225    "
36    "        "        "	.....	"        180    "

## TINNED IRON.

Nos. 18, 19 and 20 gauges, not wider than 36", nor longer than 108" @.....	c. per lb
21 to 24 gauges, and 4X    "        "        "        "        "        84	..... c.    "
25 to 27 gauges        "        "        "        "        "        "	..... c.    "

Special sizes and gauges made to order.

Loose Sheets advance  $\frac{1}{2}$ c. per lb.



We are direct importers of Tinned Iron Sheets, in larger quantities than any other concern in the country and we handle the very best and highest grade only.



We are Importers and Jobbers in Genuine

**Lagos Palm Oil.**

**Also Ceylon Cocoanut Oil.**

# TIN PLATES.

Standard Sizes, Gauges, Sheets and Net Weight per Box.

Standard Birmingham Sheet Gauge	Inch	Thick- ness	Size	Sheets	Net Weight Pounds	Standard Birmingham Sheet Gauge	Inch	Thick- ness	Size	Sheets	Net Weight Pounds
30.0	.0123	1C	14x20	112	107	30.5	.0115	100 lb.	14x20	112	100
28.1	.0155	1X	14x20	112	135	31.1	.0109	95 "	14x20	112	95
26.8	.0179	2X	14x20	112	156	31.6	.0103	90 "	14x20	112	90
25.8	.0201	3X	14x20	112	175	32.0	.0098	85 "	14x20	112	85
24.8	.0226	4X	14x20	112	197	32.5	.0092	80 "	14x20	112	80
23.9	.0251	5X	14x20	112	219	33.1	.0086	75 "	14x20	112	75
23.1	.0275	6X	14x20	112	240	33.7	.0080	70 "	14x20	112	70
22.4	.0299	7X	14x20	112	261	34.3	.0074	65 "	14x20	112	65
21.7	.0323	8X	14x20	112	282	35.0	.0069	60 "	14x20	112	60
21.3	.0338	9X	14x20	112	295	35.7	.0063	55 "	14x20	112	55
20.8	.0358	10X	14x20	112	312	36.5	.0057	50 "	14x20	112	50

Thick- ness	Size	Sheets	Net Weight Pounds	Thick- ness	Size	Sheets	Net Weight Pounds	Thick- ness	Size	Sheets	Net Weight Pounds
1C	20x28	112	214	2X	14x26	112	203	2X	12x12	225	161
1X	20x28	112	270	1C	14x28	112	150	1C	13x13	225	129
2X	20x28	112	312	1X	14x28	112	189	1X	13x13	225	163
3X	20x28	56	175	2X	14x28	112	218	2X	13x13	225	188
4X	20x28	56	197	1C	14x31	112	166	1C	14x14	225	150
1C	10x14	225	107	1X	14x31	112	209	1X	14x14	225	189
1X	10x14	225	135	2X	14x31	112	242	2X	14x14	225	218
2X	10x14	225	156	1X	14x56	56	189	1C	15x15	225	172
1C	10x20	225	153	2X	14x56	56	218	1X	15x15	225	217
1X	10x20	225	193	1X	14x60	56	203	2X	15x15	225	251
2X	10x20	225	223	2X	14x60	56	234	1C	16x16	225	196
1C	11x22	225	185	1C	15x21	112	120	1X	16x16	225	247
1X	11x22	225	233	1X	15x21	112	152	2X	16x16	225	285
2X	11x22	225	270	2X	15x21	112	176	1C	17x17	225	221
1C	12x24	112	110	1C	16x19	112	116	1X	17x17	225	277
1X	12x24	112	139	1X	16x19	112	147	2X	17x17	225	322
2X	12x24	112	161	2X	16x19	112	169	1C	18x18	112	124
1C	13x26	112	129	1C	16x20	112	122	1X	18x18	112	156
1X	13x26	112	163	1X	16x20	112	154	2X	18x18	112	180
2X	13x26	112	188	2X	16x20	112	178	1C	19x19	112	138
1C	14x21	112	112	1C	16x22	112	134	1X	19x19	112	174
1X	14x21	112	142	1X	16x22	112	170	2X	19x19	112	201
2X	14x21	112	164	2X	16x22	112	196	1C	20x20	112	153
1C	14x22	112	118	1C	10x10	225	77	1X	20x20	112	193
1X	14x22	112	148	1X	10x10	225	97	2X	20x20	112	223
2X	14x22	112	172	2X	10x10	225	112	1C	22x22	112	185
1C	14x24	112	128	1C	11x11	225	93	1X	22x22	112	233
1X	14x24	112	162	1X	11x11	225	117	2X	22x22	112	270
2X	14x24	112	187	2X	11x11	225	135	1C	24x24	112	220
1C	14x26	112	139	1C	12x12	225	110	1X	24x24	112	278
1X	14x26	112	176	1X	12x12	225	139	2X	24x24	112	321

Standard Birmingham Sheet Gauge	Inch	Thick- ness	Size	Sheets	Net Weight Pounds	Standard Birmingham Sheet Gauge	Inch	Thick- ness	Size	Sheets	Net Weight Pounds
27.8	.0160	D1C	12 $\frac{1}{2}$ x17	100	95	24.2	.0242	D2X	15x21	100	212
25.6	.0206	D1X	12 $\frac{1}{2}$ x17	100	122	23.0	.0278	D3X	15x21	100	244
24.2	.0242	D2X	12 $\frac{1}{2}$ x17	100	143	22.0	.0313	D4X	15x21	100	272
23.0	.0278	D3X	12 $\frac{1}{2}$ x17	100	165	27.8	.0160	D1C	17x25	50	95
22.0	.0313	D4X	12 $\frac{1}{2}$ x17	100	184	25.6	.0206	D1X	17x25	50	122
21.0	.0349	D5X	12 $\frac{1}{2}$ x17	100	206	24.2	.0242	D2X	17x25	50	143
20.2	.0383	D6X	12 $\frac{1}{2}$ x17	100	226	23.0	.0278	D3X	17x25	50	165
27.8	.0160	D1C	15 x21	100	141	22.0	.0313	D4X	17x25	50	184
25.6	.0206	D1X	15 x21	100	181	22.0	.0313	D4X	20x28	50	242

## TAGGER'S TIN AND IRON.

No.	Size	Sheets	Net Weight Pounds	No.	Size	Sheets	Net Weight Pounds
30.8	10x14	256	112	30.8	14x20	128	112
32.2	10x14	300	112	32.2	14x20	150	112
33.7	10x14	360	112	33.7	14x20	180	112
35.6	10x14	450	112	35.6	14x20	225	112

## HEATER PIPE SIZES—BRIGHT COKE FINISH TIN PLATE.

No.	Size	Sheets	Net Weight Pounds	No.	Size	Sheets	Net Weight Pounds
30.0	20x23	112	176	28.1	20x23	112	222
30.0	20x26	112	199	28.1	20x26	112	251
30.0	20x29 $\frac{1}{4}$	112	223	28.1	20x29 $\frac{1}{4}$	112	282
30.0	20x32 $\frac{1}{2}$	112	248	28.1	20x32 $\frac{1}{2}$	112	313
30.0	20x35 $\frac{3}{4}$	112	273	28.1	20x35 $\frac{3}{4}$	112	345
30.0	20x38 $\frac{1}{2}$	112	294	28.1	20x38 $\frac{1}{2}$	112	371

# ...METALS...

THE distribution of metals in Pigs, Ingots and Bars is one of the branches of our business. We are direct importers of Pig Tin, Antimony, &c. We are able at all times to sell at the closest market prices, and we would be glad to furnish you with *any* quantity desired. We import only the choicest brands of *Penang* Straits Tin.

We have large stocks constantly on hand at our warehouses in Philadelphia and New York.

Owing to the fluctuations of the market, the price for metals constantly changes. Please write us for our prices, and mention quantity and delivery wanted.

Pig Tin—Straits . . . . .	@ .....	c. per lb.
“ Australian . . . . .	.....	“
“ Banka . . . . .	.....	“
“ “Lamb and Flag” . . . . .	.....	“
“ Rerun (50 lb. pigs) . . . . .	.....	“
Bar Tin . . . . .	.....	“
Pig Lead—Soft Refined . . . . .	.....	“
Bar Lead . . . . .	.....	“
Plumbers Cake Lead . . . . .	.....	“
Spelter—Bertha (pure) . . . . .	.....	“
Prime Western . . . . .	.....	“
.....	.....	“
.....	.....	“
Ingot Copper—Lake Brands . . . . .	.....	“
“ “ Electrolytic . . . . .	.....	“
“ “ Casting Grade . . . . .	.....	“
“ “ .....	.....	“
Antimony—“Cookson’s” . . . . .	.....	“
“ “Hallet’s” Grade . . . . .	.....	“
“ “Japanese” . . . . .	.....	“
“ .....	.....	“
Price for Lake and Casting Copper Casks . . . . .	\$1.00	each.
Each Cask Lake and Casting Copper contains 1250 lbs.		

## INGOT BRASS.

**No. 1, Yellow Brass Ingot,** Free from iron and suitable for finished work.

**No. 2, Yellow Brass Ingot,** A good reliable metal for work where it is not necessary to finish.

**No. 1, Red Brass Ingot,** For all work required to be finished, and where a high degree of efficiency is required.

**No. 2, Red Brass Ingot,** For all kinds of castings, where a cheaper grade of metal can be used and where no finish is required.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE.



# SOLDER.

Buying solder is largely a **matter of confidence**. No one can tell by sight whether solder is " $\frac{1}{2}$  and  $\frac{1}{2}$ " or whether it is something else. "Straight Solder" looks exactly like solder that is not straight. A buyer is wholly at the mercy of the manufacturer. "Straight" solder is easy to make. No secret about it. Actual quality is what makes price. When a so-called " $\frac{1}{2}$  and  $\frac{1}{2}$ " Solder is offered at a lower price than what we ask, the chances are that instead of being half tin and half lead, there is more lead than tin in it.

The point we wish to impress upon consumers is: When buying Merchant's Solders you are **certain of getting just what you pay for**. The brand on every bar represents the exact proportions of its mixture. We would no more permit any variation from our Standards than would the United States Government in the minting of its coin.

To prove deception in solder is widespread we have made analysis of nearly 50 different Brands of Solders and have found but 13 per cent. of them to be as represented. The other 87 per cent. varied widely from what they were supposed to be and sold for.

This means that purchasers of 87 per cent. of these Brands are paying for what they do not get. It means that these consumers are out of money and the manufacturers of the "STRAIGHT" Solders are placed at a disadvantage.

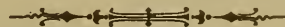
Has it ever occurred to you to find out if you are really getting what you are paying for? We will tell you upon receipt of samples sent to us, and without any expense to you.



## We Make the Following Brands

### BRANDED

"Merchant & Co., Inc. Extra Fine,"	} Only the very best selected and doubly refined materials used.	— cts. per lb.
"Merchant & Co., Inc. Warranted $\frac{1}{2}$ & $\frac{1}{2}$ "		— "
"Merchant & Co., Inc. 90 to 100."		— "
"Standard"		— "
"Merchant & Co., Inc. Plumbers' Extra Wiping."	} In cakes (made of the best selected materials, and guaranteed to give satisfaction.	— "
Double Refined Solder.		— "
" $\frac{1}{2}$ and $\frac{1}{2}$ Wire Solder."	} No. 8, 10, 12, 14 and 16 Wire Gauge (for electrical and other purposes)	— "



Any quality capping  $\square$  bars,  $\frac{1}{4}$  cent per pound extra. Triangular  $\triangle$  bars  $\frac{1}{4}$  cent per pound extra. Slab solder 4 x 6 in. x  $\frac{1}{2}$  in. thick, no extra. Sizes of our solder boxes are 25, 50, 100, 125, 150, 200, 250, 300 and 500 pounds each. Wire solder is sold on reels of 100 lbs. Reels 25 cents each Returnable. Size of "Standard" "Double Refined" and "Warranted  $\frac{1}{2}$  and  $\frac{1}{2}$ " about  $1\frac{1}{4}$  pounds each; all others  $1\frac{3}{4}$  pounds each.

MANUFACTURERS OF  
ALL GRADES OF

# Babbitt *and* Anti-Friction Metals

*Genuine Babbitt Metal,* 

*Iridium Anti-Friction Metal,*  
(Registered 1888.)

 *"Superior" Babbitt Metal.*

Our Standard "A," "B," "C," "D," "E," "F" Grades.

*Special mixtures made to order, and prices quoted on receipt of samples; quality guaranteed equal to samples at all times.*

---

HARD TYPE *and* LINOTYPE METALS,  
STEREOTYPE *and* ELECTROTYPE METALS,  
SPACE *and* QUAD METALS,  
OUR STANDARD GRADES.

---

## Iridium Anti-Friction Metal

THIS is a special, extra hard, tough and durable alloy, possessing rare anti-frictional qualities, combined with great strength. It is especially adapted for very heavy pressure with high speed. For many purposes it is better than Genuine Babbitt Metal, and Brass Bearings, though costing less in price. It is also lighter in weight than either

## Genuine Babbitt Metal

**G**UARANTEED by us to contain no lead. It is genuine, and made in the very best possible manner, only new pig tin, antimony and copper being used in its manufacture, and these of the best quality, combined in best proportions.

## "Superior" Babbitt Metal

**S**O MUCH so-called "Genuine" is offered (containing 10 per cents and more of lead) at a less price than the Genuine metal can be made for, that we brought out a special grade—the "Superior" which we offer to those wishing a good metal, but ONE not quite as expensive AS the Genuine.


## "A" "B" "C" "D" "E" "F"

**I**N MAKING these grades our first consideration is quality, and we venture to say that our A, B, C, D, E and F metals are never excelled, and but very seldom equalled. By our largely increased business we have proof that our desire to supply our customers with extra fine Babbitt Metals has met with success.

WRITE FOR PRICES.

# We Distribute

a greater quantity of Brass and Copper goods than any other Metal house in the United States; and to you this insures the bottom market rates, the promptest mill shipments, and a "Call" upon the largest stock of Brass and Copper products carried by any single manufacturer or jobber in the country.



## Cornice, Braziers, Roofing and Polished Copper

### COPPER BOTTOMS



### Seamless Drawn Brass and Copper Tubing in all Standard and odd sizes

### Iron Size Seamless Drawn Tubing in Brass and Copper

### SHEET BRASS in Rolls and Flat Sheets

### Brass Rods                  Copper Rods Pump Cylinders              Brass Wire

### Pure Lake Copper Wire for Electrical Purposes.

 Write for our Catalogue of Brass and Copper Specialties. 



# Hot Rolled Braziers' Sheathing and Roofing Copper.

We guarantee our copper to stand any test in working to which it may be subjected, and to be of the very finest quality known.

## STOCK SIZES

Constantly on hand in our stores in Philadelphia and New York.

14x48 inches in sheets weighing from 12 oz. to 42 oz.  
per square foot.

24x 48 inches, in sheets weighing from	5 to 100 lbs. per sheet.
30x 60           "           "           "	9 to 160       "       "
36x 72           "           "           "	16 to 216       "       "
48x 72           "           "           "	24 to 288       "       "
30x120           "           "           "	40 to 200       "       "
33x 96           "           "           "	25 to 150       "       "
36x144           "           "           "	80 to 250       "       "
18x 96           "           "           "	14 and 16 oz. per sq. ft
20x 96           "           "           "	14       "       16       "       "
24x 96           "           "           "	14       "       16       "       "
30x 96           "           "           "	14, 16, 18       "       "
36x 96           "           "           "	14, 16, 18       "       "

## ALSO COPPER TINNED ON ONE SIDE.

12x48 inches . . . . .	14 oz. per sq. ft.
14x48       "       . . . . .	from 12 to 20       "       "
24x48       "       . . . . .	"       14 to 20       "       "
30x60       "       . . . . .	"       14 to 20       "       "

## CIRCLES, SEGMENTS, AND PATTERN SHEETS.

And all odd or other sizes than given above, furnished to order with great promptness.

# Cold Rolled Cornice Copper.

Patent leveled, free from buckles, and absolutely flat. True to gauge and weight, uniform and bright color. Guaranteed to stand double seaming without cracking.

## STOCK SIZES

Constantly on hand in our stores in Philadelphia and New York.

14 oz.	16 oz.	18 oz.	20 oz.
14 x 48	14 x 48	14 x 48	14 x 48
18 x 96	18 x 96	20 x 96	30 x 96
20 x 96	20 x 96	30 x 60	36 x 96
24 x 48	24 x 48	30 x 72	
24 x 96	24 x 96	30 x 84	
26 x 96	26 x 96	30 x 96	
28 x 96	28 x 96	36 x 72	
30 x 60	30 x 60	36 x 96	
30 x 72	30 x 72		
30 x 84	30 x 84		
30 x 96	30 x 96		
36 x 72	36 x 72		
36 x 84	36 x 84		
36 x 96	36 x 96		

Also cold rolled and tinned one side. Mirror finished or polished on the other side.

14 x 48 inches . . . . .	from 14 to 20 oz. per sq. ft.
20 x 48 " . . . . .	14 " "
24 x 60 " . . . . .	14 " "
24 x 48 " . . . . .	14 and 16 " "
30 x 60 " . . . . .	14 and 16 " "
36 x 72 " . . . . .	14 and 16 " "
14 x 52 " (No. 7 Boiler), . . . . .	14 " "
14 x 56 " " 8 " . . . . .	14 " "
14 x 60 " " 9 " . . . . .	14 " "

## SHEET COPPER.

Table of Weight per Square Foot, and Thickness  
per Stubs' Wire Gauge.

SPECIAL SIZES MADE TO ORDER.

Stubs' Gauge (nearest No.)	Thickness in decimal parts of 1 inch.	Ounce per square foot	14x48 lbs.	24x48 lbs.	24x96 lbs.	30x60 lbs.	36x72 lbs.	48x72 lbs.	30x96 lbs.	36x96 lbs.	30x120 lbs.	36x144 lbs.
35	.00537	4	1.16	2	4	3.12	4.50	6.	5.00	6.00	6.24	9.00
33	.00806	6	1.75	3	6	4.68	6.75	9.	7.50	9.00	9.36	13.50
31	.0107	8	2.33	4	8	6.25	9.00	12.	10.00	12.00	12.50	18.00
29	.0134	10	2.91	5	10	7.81	11.25	15.	12.50	15.00	15.62	22.50
27	.0161	12	3.50	6	12	9.37	13.50	18.	15.00	18.00	18.74	27.00
26	.0188	14	4.08	7	14	10.93	15.75	21.	17.50	21.00	21.86	31.50
24	.0215	16	4.66	8	16	12.50	18.00	24.	20.00	24.00	25.00	36.00
23	.0242	18	5.25	9	18	14.06	20.25	27.	22.50	27.00	28.12	40.50
22	.0269	20	5.83	10	20	15.62	22.50	30.	25.00	30.00	31.24	45.00
21	.0322	24	7.00	12	24	18.75	27.	36.	30.00	36.00	37.50	54.
19	.0430	32	9.33	16	32	25.00	36.	48.	40.00	48.00	50.00	72.
18	.0538	40	11.66	20	40	31.25	45.	60.	50.00	60.00	62.50	90.
16	.0645	48	14.00	24	48	37.50	54.	72.	60.00	72.00	75.00	108.
15	.0754	56	16.33	28	56	43.75	63.	84.	70.00	84.00	87.50	126.
14	.0860	64	18.66	32	64	50.	72.	96.	80.00	96.00	100.	144.
13	.095	70		35	70	55.	79.	105.	87.50	105.00	110.	158.
12	.109	81		40½	81	63.	91.	122.	101.25	121.50	126.	182.
11	.120	89		44½	89	70.	100.	134.	111.50	133.50	140.	200.
10	.134	100		50	100	78.	112.	150.	125.00	150.00	156.	224.
9	.148	110		55	110	86.	124.	165.	137.50	165.00	172.	248.
8	.165	123		61	123	96.	138.	184.	153.75	184.50	192.	276.
7	.180	134		67	134	105.	151.	201.	167.50	201.00	210.	302.
6	.203	151		75½	151	118.	170.	227.	188.75	226.50	236.	340.
5	.220	164		82	164	128.	184.	246.	205.00	246.00	256.	368.
4	.238	177		88½	177	138.	199.	266.	221.25	265.50	276.	398.
3	.259	193		96	193	151.	217.	289.	241.25	289.50	302.	434.
2	.284	211		105½	211	165.	238.	317.	263.75	316.50	330.	476.
1	.300	223		111½	223	174.	251.	335.	278.75	334.50	348.	502.
0	.340	253		126½	253	198.	285.	380.	316.25	379.50	396	570

These weights are theoretically correct, but variations must be expected in practice.

## Copper Bottoms.

## STOCK SIZES.

Thickness, 14 oz. sq. ft.

T. K. Pitts,	5	5½	6	7	8	9	10	inch.
T. K. Flats,	—	—	6	7	8	9	—	"

Special sizes or thickness made to order.

## SIZES AND WEIGHTS.

14 oz. sq. ft. the Standard.

## FLAT BOTTOMS.

Cold Rolled and Tinned on  
one side.

## EASTERN PATTERN.

No. 6,	10½ x 19½	in....1	lb. each.
" 7,	11½ x 21½	" ...1½	lbs. "
" 8,	12½ x 23½	" ...1½	" "
" 9,	13½ x 24½	" ...1½	" "

## WESTERN PATTERN.

No. 6,	9½ x 20	in....1	lb. each.
" 7,	10½ x 20½	" ...1½	lbs. "
" 8,	12 x 22	" ...1½	" "
" 9,	13 x 24	" ...1½	" "

## SUNK BOTTOMS.

Hot Rolled and Tinned on  
One Side.

## EASTERN PATTERN.

No. 6,	10 x 19½	in....1¼	lbs. each.
" 7,	11½ x 21½	" ...1¾	" "
" 8,	12½ x 23½	" ...2	" "
" 9,	13½ x 24½	" ...2¼	" "

## WESTERN PATTERN.

No. 6,	10½ x 18½	in....1¼	lbs. each.
" 7,	11½ x 21½	" ...1½	" "
" 8,	12½ x 22½	" ...1¾	" "
" 9,	13½ x 24½	" ...2	" "

## CIRCLES, PITTS.

Hot Rolled and Tinned on  
one side.

No. 6,	8½ in. diam.	.....¾	lb. each.
" 7,	9¼ " " "	.....7⁄8	" "
" 8,	10¼ " " "	.....1	" "
" 9,	11¼ " " "	.....1¼	" "

## CIRCLES, FLATS.

Cold Rolled and Tinned on  
one side.

No. 6,	8½ in. diam.	.....11⁄8	lb. each.
" 7,	9¼ " " "	.....3⁄8	" "
" 8,	10¼ " " "	.....1⁄2	" "
" 9,	11¼ " " "	.....¾	" "

Where exact sizes are not specified, orders will be filled as above.



# Copper Belt and Hose Rivets and Burs.

## BELT RIVETS AND BURS

NUMBER OF RIVETS AND BURS TO THE POUND.

Price per lb.	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{1}{2}$	Burs.
No. 7, 49c	272	250	228	180	164	160	148	112	116	100	84	80	69	345
" 8, 50c	276	248	208	200	178	172	152	136	110	104	96			390
" 9, 52c	340	280	272	248	228	220	184	176	156	136				610
" 10, 54c	544	448	384	340	304	300	272	238	204					716
" 12, 58c	588	512	452	404	364	334	304	272						985
" 13, 60c	996	852	532											1630

## HOSE RIVETS AND BURS.

Price per lb.	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$	$\frac{3}{4}$	1	Burs.
No. 7, 49 c			155	142	133	122	109	97	345
" 8, 50 c	308	201	181	160	150	135	116	100	390

## BRAZIERS' RIVETS,

cents per pound, net.

COPPER BOILER RIVETS MADE TO PARTICULAR  
SIZES AND PATTERNS.

Number of Copper Braziers' Rivets in one pound.

No. ....	0	1	2	3	4	5	6	7	8	9	10
Quantity .....	148	100	70	44	34	24	18	12	9	6	4

## COPPER TANKS.

Smaller than  $\frac{3}{8}$  in. or 3 oz. . . . . per lb.  
 7-16 in. or 4-oz.,  $\frac{1}{2}$  in. or 6 oz. . . . . "  
 Larger than  $\frac{1}{2}$  inch . . . . . "

Sizes

Ounce . . . . .	6	8	10	12	14	16	18	20	22	24
Length, inch . . . .	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{10}{16}$	$\frac{11}{16}$	$\frac{12}{16}$	$\frac{13}{16}$	$\frac{14}{16}$	$\frac{15}{16}$	$\frac{16}{16}$	$\frac{18}{16}$

## COPPER NAILS.

	2	3	4	5	6	7	8	10	12	16	20d
Inches, 1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2	$2\frac{1}{4}$	$2\frac{1}{2}$	3	$3\frac{1}{4}$	$3\frac{1}{2}$	4	

Packed 50 lbs. per case. Price Net.....per lb.

# ...RULES to observe in ordering



## *BRASS and COPPER BRONZE METAL . . GERMAN SILVER .*



All Sheet Brass, Bronze Metal, German Silver, etc., will be measured by Brown & Sharpe's Gauge unless otherwise ordered. Mention thickness, width, length and temper. Sheet metal will be sent Annealed unless ordered of Hard or Spring temper.

Brass Wire will be measured by Brown & Sharpe's Gauge, and German Silver and Copper Wire by Brown & Sharpe's Gauge. Unless otherwise ordered, Brass Wire will be made Market Hard, or One Number Hard; and German Silver and Copper Wire will be sent annealed.

Unless otherwise ordered, the thickness of Brazed Tubing will be measured by Brown & Sharpe's Gauge, and that of Seamless Tubing by Stubs' Gauge; the sizes given for the diameter will be considered Outside Measurement; and all tubing will be sent Hard in temper and in lengths of twelve feet. It will be of great assistance in executing orders for Brass Tubing to know if they are to be used for bending; and in ordering Copper Tubes, it is well to state specifically whether they are to be bent, coiled, or flanged.

We advise the adoption of the Micrometer Caliper to determine the thickness of metal and the size of wire in decimal parts of an inch, and the abolition of all other gauges. This will prevent confusion and loss of time and money, as all other gauges are imperfect and unreliable.

Charges for making or altering Dies, Tools, etc., are made only to cover extra labor and expense on special material ordered; and ownership of such Dies, Tools, etc., is not conveyed to customers by reason of such charges.

When material of any kind furnished by us is defective or not up to standard, we hold ourselves ready at all times to take it back or replace it; but under no circumstances will we allow damages or any claim for expenses involved in using our stock.



Merchant's Improved

# Slip Joint Eave Trough.

NO CROSS SEAMS.

The Longest  
Widest  
Deepest

Trough in the  
Market.

Each piece measures **full** 10 feet **after** being put together. Slip joints require no solder, are easily connected, are not affected by the expansion and contraction of the metal, and consequently are the best to use. Gives less trouble and better satisfaction. Bead on 3, 3½, 4, 4½ and 5 inch trough is ½ inch. On all the larger sizes the bead will be ⅝ or ¾ inch.

This Slip Joint Trough is positively more easily put together, and makes a better end connection than any other Slip Joint Trough in the market. The beads are strong and uniform.

## PRICE LIST.

250 Feet to each Case.

Size, (inside bead)				28 Gauge Galvanized Steel Per foot.
3-inch	—	6-inch	girt—, ½-inch bead	14 cents.
3½-inch	—	7-inch	" —, ½-inch "	15 "
4-inch	—	8-inch	" —, ½-inch "	17 "
4½-inch	—	9-inch	" —, ½-inch "	19 "
5-inch	—	10-inch	" —, ½-inch "	20 "
6-inch	—	12-inch	" —, ⅝-inch "	24 "
7-inch	—	14-inch	" —, ⅝-inch "	28 "
8-inch	—	16-inch	" —, ⅝-inch "	31 "

If lap joints are wanted deduct 1 cent per foot. Cases no charge.

For Eave Trough with **double bead**, add 3 cents per foot to the above list prices, and double beads must have two inches more girt than of single bead the same size.

The list price of Galvanized trough are based on No. 28. U. S. Gauge.

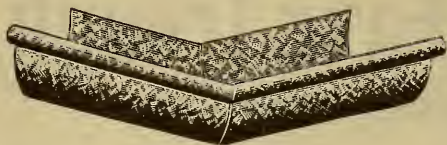
For heavier trough than No. 28. gauge add the following :—No. 27, 1 cent ; No. 26, 2 cents ; No. 24, 6 cents ; No. 22, 10 cents ; No. 20, 15 cents per foot.

Discounts case lots 250 feet. }	Galvanized No. 28 Gauge . . . . .		Per Cent
	" No. 27 Gauge and heavier . . . . .		

We always ship Galvanized Trough with **slip joint** and **single** bead, half right hand and half left hand; **unless otherwise ordered**.



# MITRES.



Outside Corner Miter.

These mitres are made complete ready for use, for both inside and outside bead, either slip or lap joint.

## PRICE LIST.

### Galvanized Steel.

PER DOZEN.

	Slip Joint	Lap Joint
3½ inch.....	\$3.00	\$2.50
4 inch.....	3.25	2.75
5 inch.....	3.50	3.00
6 inch.....	4.00	3.50

When ordering Slip Joint Mitres, state whether right or left hand is wanted, and whether for "Inside" or "Outside" Corner; otherwise half rights and half lefts, and half "Inside" and half "Outside" Corner Mitres will be supplied.

NOTE.—For Double Bead Mitres, add 50 cents per dozen to above list.

Discounts, Galvanized,..... per cent.



## END PIECES WITH OUTLET.

No. 28 Gauge Galvanized Steel.

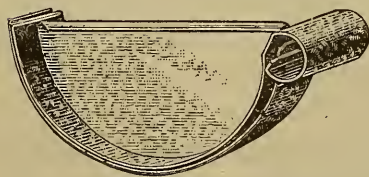


Right Hand.

End pieces furnished either with or without ends closed, and charged for at the same rate as trough, with additional charges for outlets and closing of ends.

When ordering, state size of outlet wanted and exact distance from end to the center of outlet; also state whether with or without Slip Joint, and whether right or left hand, and the length wanted.

## END PIECE WITH SLIP JOINT.



Made of No. 28 Gauge Steel.

### PRICE LIST, PER DOZEN.

	3½-in.	4-in.	5-in.	6-in.	7-in.	8-in.
Galvanized.	\$2.00	\$2.25	\$2.50	\$3.00	\$4.00	\$4.50

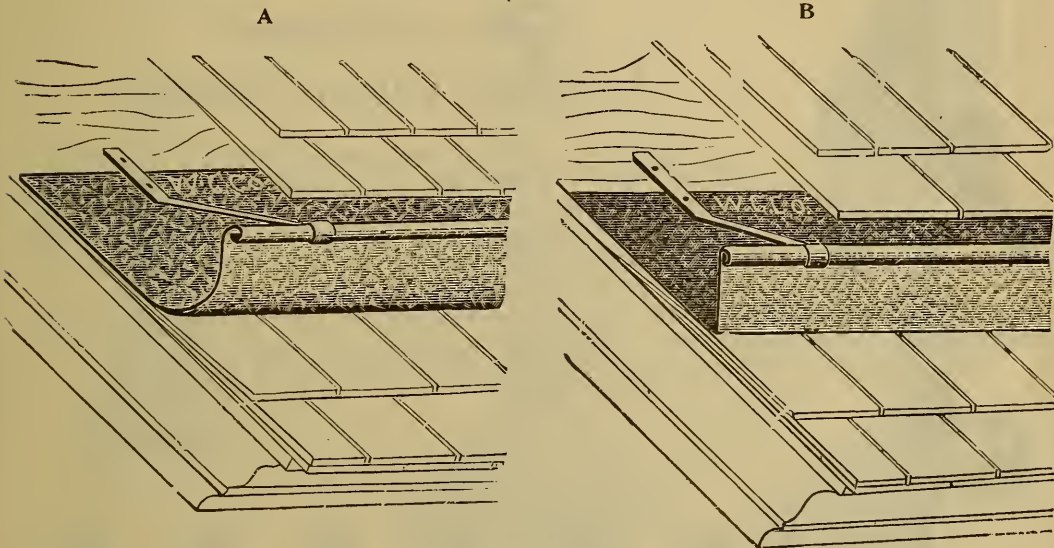
Discount..... per cent.

# Roof Gutters.

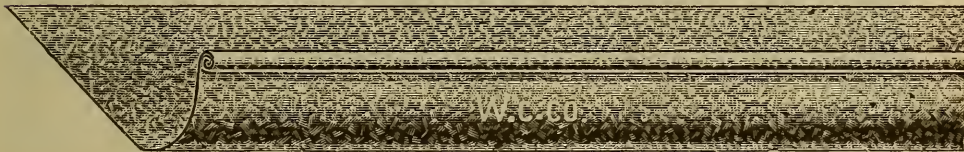
Made in 10 Foot Lengths, of No. 28 Gauge Galvanized Steel.

The following engravings show two styles, "A" and "B," Roof Gutters. The hangers are applied in such a manner as to leave no exposed nail or screw heads, (as cuts readily show); therefore, there can be no leaks from splitting or nail holes, as in the old-style way with wood fronts and wood brackets.

These Gutters are by far the best produced, and are sold at such prices that make them as cheap as those made of wood, lined with tin.



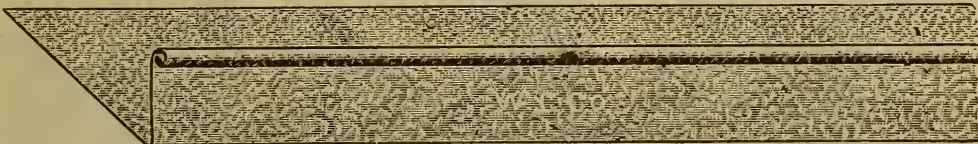
## PRICE LIST.



Style A.

Galvanized.

Cut of 14 inch sheet, $\frac{5}{8}$ or $\frac{3}{4}$ bead, complete, per foot . . . . .	\$ .35
Cut of 20 inch sheet, $\frac{5}{8}$ or $\frac{3}{4}$ bead, complete, per foot . . . . .	.50
Cut of 24 inch sheet, $\frac{5}{8}$ or $\frac{3}{4}$ bead, complete, per foot . . . . .	.60



Style B.

Galvanized.

Cut of 15 inch sheet, $\frac{5}{8}$ or $\frac{3}{4}$ bead, complete, per foot . . . . .	\$ .37
Cut of 20 inch sheet, $\frac{5}{8}$ or $\frac{3}{4}$ bead, complete, per foot . . . . .	.50
Cut of 24 inch sheet, $\frac{5}{8}$ or $\frac{3}{4}$ bead, complete, per foot . . . . .	.60

For heavier Gauges than No. 28 add the following advances to No. 28 list :  
For No. 27, one cent; No. 26, 2 cents; No. 24, 6 cents; No. 22, 10 cents, and  
No. 20. 15 cents, all per foot.

DISCOUNTS . . . . . Per Cent.

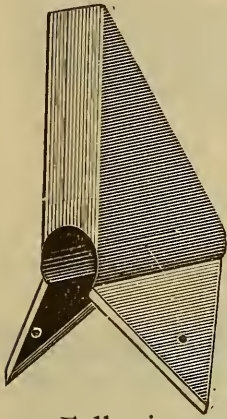
Hangers for above Trough, each, net . . . . . \$ .03



# GALVANIZED CRESTING BLOCKS AND FINIALS.

Made of Galvanized Steel, to Fit  
Two (2) Inch Ridge Roll.

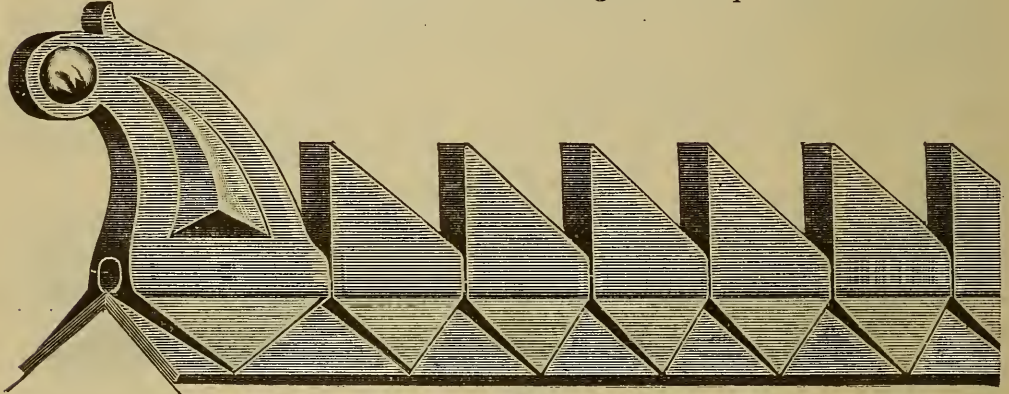
Can be Adjusted  
To Make Various Designs



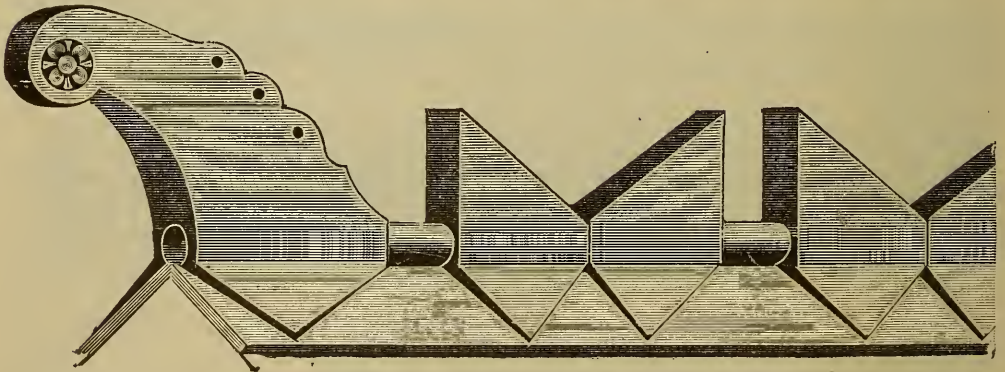
The above crestring block when applied to ridge roll will be found to meet the requirement for a cheap and ornamental ridge crestring. It is applied by slipping the block over roll, spacing as required, and nailed through lower flange of block with wire nail, securing ridge roll in place at same time.

Following cuts show blocks placed on ridging in two positions, each imparting a different appearance. Five adjustments can be made.

Size of block, 6 inches long by 5 inches high from top of roll.



No. 116.



No. 114.

## PRICE LIST.

Galvanized Cresting Block, per 100 . . . . .	\$16.00
No. 112 Galvanized Finial, 13½" high, each . . . . .	1.30
No. 113-114 " " 11 " " . . . . .	1.50
No. 115-116 " " 13 " " . . . . .	1.80
DISCOUNT . . . . .	per cent



# FINIALS MADE OF ...GALVANIZED STEEL...

When ordering Finials state whether Base is to be Square, Round or Octagon, and give Pitch of Roof. Crating at cost.

We can make and give estimates on any other design, upon receipt of sketch or cut.



No. 303  
Height 3 ft. \$9 00



6½ feet high.  
No 625—each, \$24 00



No. 323  
Height 3 ft. \$8 00•



No. 307  
Height 4 ft. \$13 00



No. 324  
Height 4½ ft. \$21 00

# B. B. GUTTER HANGERS.

The most successful HANGER ever invented. More sold than all other kinds combined.

The only perfect open gutter hanger in existence.

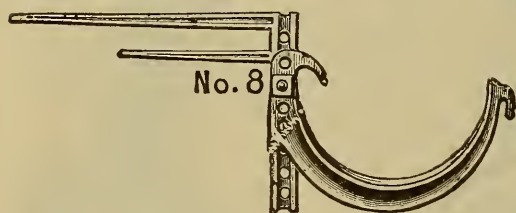
Patented October 13 1879

Patented August 11, 1885

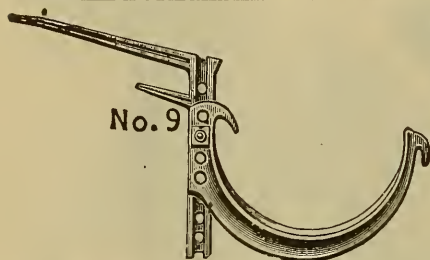
Patented July 6, 1886



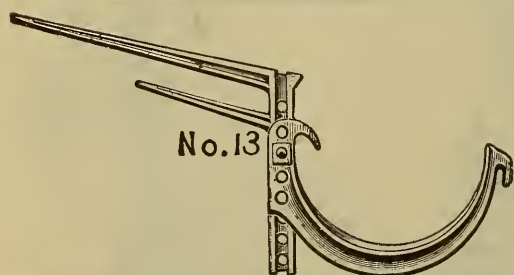
No. 7 is made to drive from 3 to 4 inches square in the cornice. The lower prong forms a brace for the upper, and makes it very strong and firm.



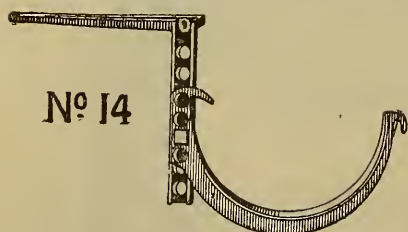
No. 8 is made to drive from 3 to 6 inches square in the cornice. This iron is intended for eaves where the shingles project far over the cornice.



No. 9 is to drive with the pitch of the roof. Same length as No. 7. Suited for narrow moulded cornice.



No. 13 Drives with the pitch of the roof. Same length as No. 8.



No. 14 is made to drive in brick or stone fronts.

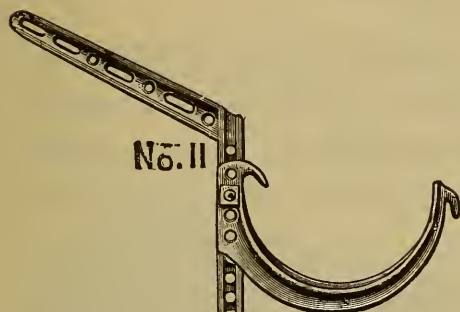
For prices see page 41.

Always state number wanted and whether black or galvanized.

## THESE HANGERS MAKE THE GUTTER EXCEEDINGLY STRONG AND ORNAMENTAL.

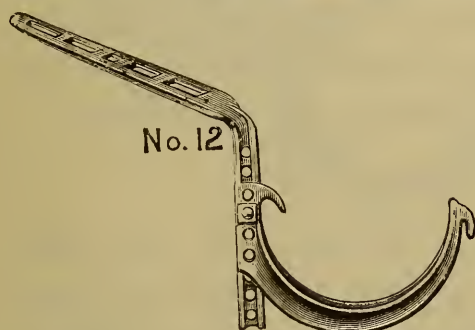
ARCHITECTS INDORSE THEM EVERYWHERE. THE ONLY HANGER TO LEAVE AN OPEN, CLEAR, EXPANDING GUTTER.

**NO TOOLS NEEDED—EASILY PUT UP.**



No. 11 is especially adapted to barns, mills and factories, where the rafters are exposed. The shank is nailed to the side of rafter, assorting the 4, 6 $\frac{1}{4}$  and 9-inch shank to correspond with the amount of fall required. If more fall is desired, use the extension shank, to bolt on the end.

For Hinged, see No. 18.



No. 12 is made  $\frac{1}{4}$  pitch to fasten under the shingles or slate, and are bent to suit the pitch. The holes on top of the shank are made beveling so that the nail can be driven at any point and enter the shank.

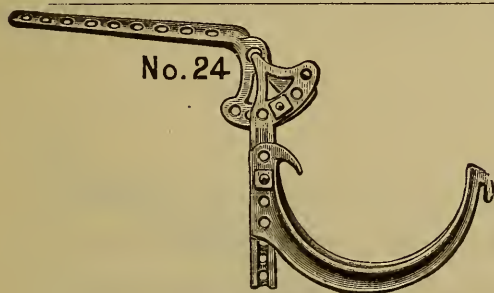
No. 15 is made for flat roofs.

No. 25 for steep roofs, half pitch.

No. 17 is Hinged for any pitch.

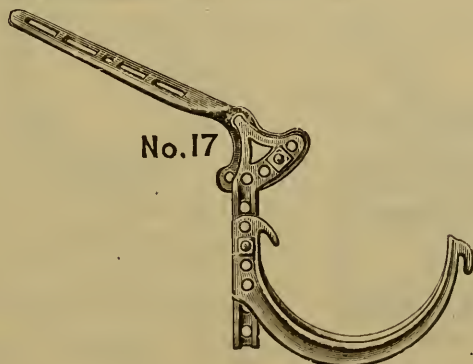
See No. 17 below.

No. 12 Shank also furnished extra heavy when so ordered, at double list.



No. 24 is hinged to bolt on corrugated or other iron roofs, for awnings, mills and factories.

Note the Hinge and Circle, both adjust to every  $\frac{1}{8}$  of an inch.

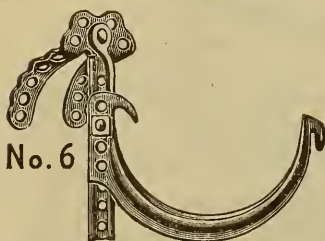


Always state number wanted and whether black or galvanized.

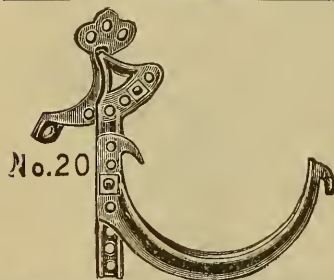


**B. B.****GUTTER HANGERS—THE HANDIEST AND  
BEST EVER INVENTED.****No. 10****TRY THEM AND BE CONVINCED**

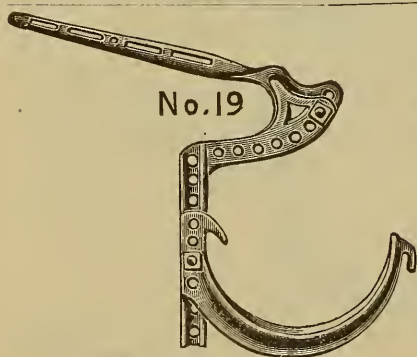
No 10 is made to nail against square box cornices, and is specially adapted to barns, mills and factories.

**No. 6**

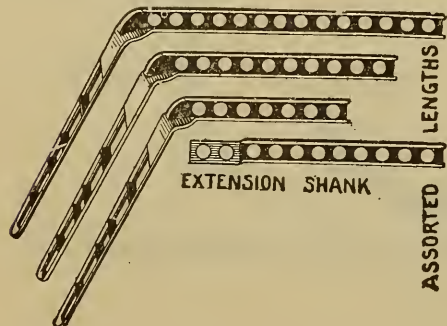
No 6 is made specially to nail against O. G mouldings. The two stays are made to fit in the cove and can be bent to suit any variation.

**No. 20**

No 20 is hinged for any pitch, can be nailed or screwed to various shaped mouldings at any angle desired.

**No. 19**

No. 19 is used either on top or under the shingles and suited for short projections of the shingles over the mouldings.

**ASSORTED LENGTH.**

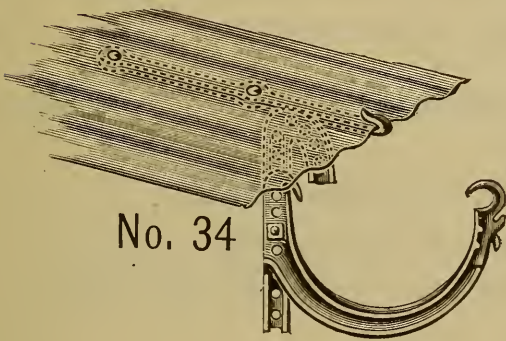
All orders are filled with assorted length shanks unless otherwise ordered.

Always state number wanted and whether black or galvanized.

# B. B. New Hinged Shanks and Circles.

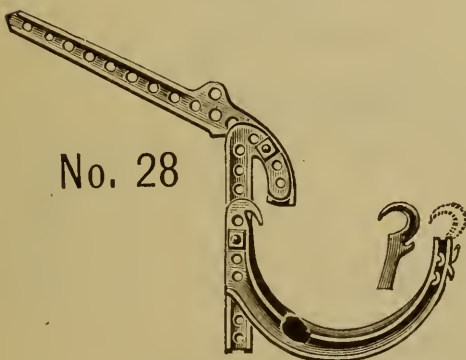
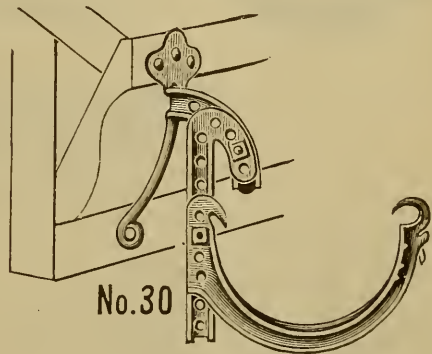
PATENT APPLIED FOR.

This shank combines great strength and variation ; also allows the stems to hang close up to the cornice and the circle close to the shingles.



No. 34 is clamped direct to the metal roof, needing only one bolt through the iron. A valuable article for awnings and corrugated roofs.

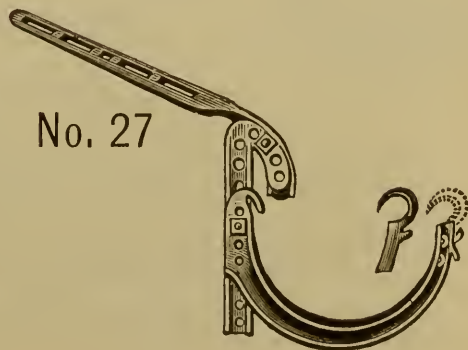
No. 30 will span over various-shaped mouldings and is easily bent larger or smaller before nailing to the eave.



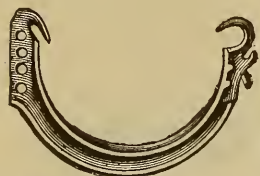
No. 28 can be nailed to exposed rafter in any desired angle.

No. 27 is fastened under the shingles, the hinge and circle both adjust to every  $\frac{1}{8}$  inch.

This shank also furnished extra heavy when so ordered, at double list.



Always state number wanted and whether black or galvanized.

**THE ROYAL CIRCLE.**

For Single Bead.

All Sizes.

**THE GEM CIRCLE.**

For Single Bead.

All Sizes.

**THE PENN CIRCLE.**

For Double-Beaded Troughs.

All Sizes.

**THE STANDARD CIRCLE.**

For 1/2-inch Single Beads.

GLOBE CIRCLE for 3/4-inch Bead is same style.

**PRICE LIST OF SHANKS.**

Put up 50 in a Package.

	Per 100.
Nos. 7-9 .....	\$2.00
Nos. 8-10-13-14 .....	3.00
Nos. 6-11-12-15-20-25-30 .....	3.50
Nos. 17-18-24-27-28-34 .....	4.00
No. 19 with bolt for hinge .....	5.00
Extension Shank, with extra bolt .....	2.00

DISCOUNT.....per cent.

**PRICE LIST OF CIRCLES.**

With Bolt and Strap.

	Per 100 Net.
3-3 1/4-3 1/2-3 3/4-4-4 1/4 .....	\$2.00
4 1/2-5-5 1/4 inches .....	3.00
5 3/4-6-6 1/2 inches .....	4.00
7-7 1/2-8 inches .....	5.00
9-10 inches .....	6.00

For Galvanized, add 25 per cent to List.

DISCOUNT.....per cent.

NOTE.—In measuring Gutter, always spread it to a true compass inside of bead.

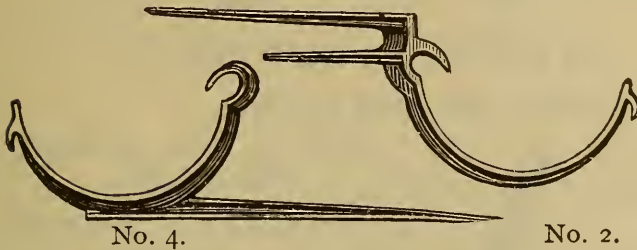
Leading size Circles : 3 1/2-4-4 1/4-4 1/2-5 and 6 inches.

Leading Shanks : Nos. 7-8-9-10-11 and 12.

Always state style and size of Circles wanted and number of shanks. Also whether Black or Galvanized.



## PLAIN GUTTER HANGERS.



50 in a package.

### PRICE PER 100.

4 or 4 1/4 inches.

4 1/2 or 5 inches.

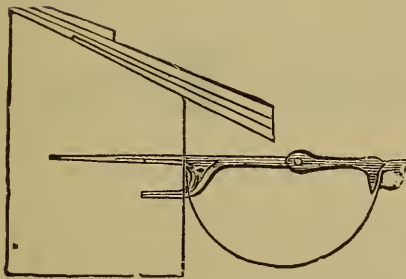
No. 1 or 3.....	\$3 50
No. 2 or 4.....	4 00

\$4 50
5 00

The extra short drive on No. 1 and No. 2 makes them extra strong and easy to drive in the box.

## EAVE-TROUGH SPIKES.

Measure Between Beads.



### PRICE, PER 100, BLACK.

Inches.....	4	4 1/2	5	6	7
Short Drive, No. 1..	\$3 00	3 50	4 00	4 50	5 00
Med. Drive, No. 2..	\$4 00	4 50	5 00	5 50	6 00
Long Drive, No. 3..	\$5 00	5 50	6 00		

Always state what size Bead is wanted.

## REPAIR SPIKES.

### PRICE PER 100, BLACK.

7 inches long .....	\$2 00
9 inches long .....	2 50
12 inches long .....	3 00

Always state what size Bead is wanted.

Eave-Trough Hangers should be placed from 3 feet to 3 1/2 feet apart.

## DOUBLE STRENGTH

## Wire Eave Trough Hanger.

CHEAP STRONG DURABLE

SAMPLE MAILED ON APPLICATION.



## PRICE LIST

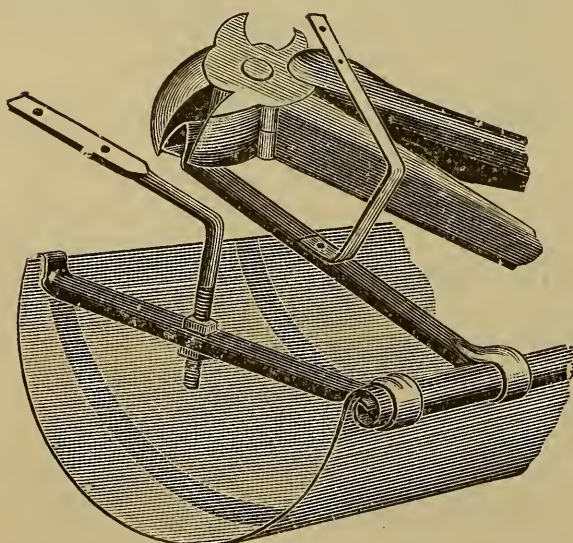
3¼ inch Trough	\$1.25 per gross
4 " "	2.50 " "
4½ " "	2.75 " "
5 " "	3.00 " "
6 " "	3.50 " "
7 " "	4.00 " "
8 " "	4.50 " "

## Sizes Taken Inside of Bead

Double Bead Hangers 25 cts per gross advance.

DISCOUNT . . . per cent

## Imperial Eave Trough Hanger.



## PRICE LIST

## Per Gross, Net.

3 inch, with Rods.....	\$3.75
3½ " " " .....	4.00
4 " " " .....	4.25
4½ " " " .....	4.35
5 " " " .....	4.50
6 " " " .....	5.00
7 " " " .....	6.00
8 " " " .....	8.00
3 " " Straps.....	3.50
3½ " " " .....	3.50
4 " " " .....	3.75
4½ " " " .....	3.85
5 " " " .....	4.00

Tongs to apply Hangers each .40

N. B.—Sizes taken inside of bead. In ordering always state size of bead. Hangers are always sent with rods unless otherwise ordered.

## STANDARD SPEAKING TUBES. PRICE LIST.

1 Inch	1 1/4 inch	1 1/2 Inch.
per foot .03c.	.04 1/2 c.	.05 1/2 c.
per 1000 ft. \$24.00	\$36.00	\$44.00

DISCOUNT.....

Speaking Tube Whistles. . . . . Speaking Tube Elbows.

AT LOWEST MARKET PRICES.

## COMBINATION METALLIC LATHING.



Patented and manufactured in the United States for fire proof construction.

One Hundred Medals Have Been Awarded.

None Better or more Extensively Used.

Sizes, 15 x 96 and 30 x 96.

Put up in bundles of 100 square feet.

Price 26 cents per square yard.

## WIRE LATHING.

This wire cloth is woven of meshes  $\frac{3}{8}$  by  $\frac{3}{8}$  and of No. 19 gauge wire, and is applied directly in place by securing the wire cloth to wooden furring strips by staples.

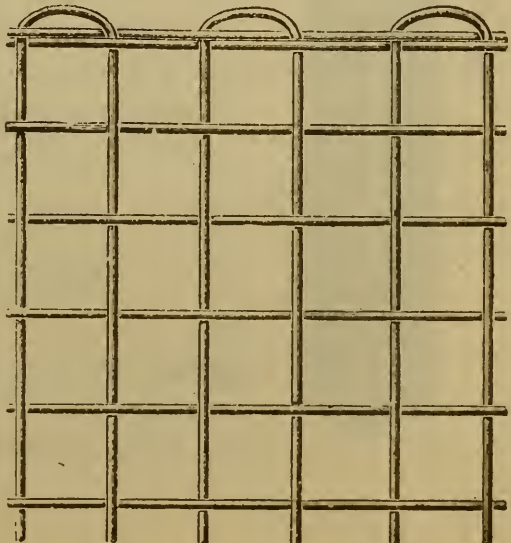
The length of the rolls is 100 lineal feet and the widths are from 12 to 48 inches.

We recommend this as thoroughly Fire-proof.

This wire lathing for heater flues work cannot be excelled. Widths generally used 12, 14, 16, and 18 inch.

Write for prices.

Send for sample roll.





# MERCHANT'S

## ROUND AND SQUARE CORRUGATED

## GALVANIZED EXPANDING CONDUCTOR

TEN (10) FEET LONG, WITHOUT A CROSS SEAM.



Will not Burst When Full of Ice.

THE LONGEST SINGLE PIECE CORRUGATED PIPE MADE.

UNIFORM AND PERFECT CORRUGATIONS

MADE FROM No. 28 GAUGE GALVANIZED STEEL

### PRICE LIST

#### ROUND.

Diam.	per ft.
2 inch .....	13 cents
3 " .....	15 "
4 " .....	20 "
5 " .....	25 "
6 " .....	30 "

#### SQUARE.

Diam.	per ft.
$1\frac{3}{4} \times 2\frac{1}{4}$ , equal to 2 inch round .....	14 cents
$2\frac{3}{8} \times 3\frac{1}{4}$ , " " 3 " " .....	16 "
$2\frac{3}{4} \times 4\frac{1}{4}$ , " " 4 " " .....	21 "
$3\frac{3}{4} \times 5$ , " " 5 " " .....	26 "

Our Square Galvanized Corrugated Pipe is the **LARGEST** in the market, having nearly **ONE INCH** greater diameter than many other makes.

FOR EXAMPLE:—Our 5-inch Square at 26 cents per foot, is nearly equal to the 6-inch Square Pipe of some other makes that cost 31 cents per foot.

(IN CRATES, NESTED, 500 FEET.)

Discount, Round.....per cent.  
 " Square....."

NESTED Pipe takes lower FREIGHT RATES than not Nested.

For heavier than No. 28 Gauge, WRITE FOR PRICES.

# COLD ROLLED

## Copper Corrugated Conductor

With SHOES and ELBOWS

ROUND or SQUARE, Per Foot

Sizes	12 oz.	14 oz.	16 oz.	18 oz.
2 Inch	30c.	32c.	34c.	38c.
3 "	36c.	38c.	40c.	44c.
4 "	44c.	48c.	50c.	54c.
5 "	60c.	64c.	68c.	74c.
6 "	64c.	68c.	72c.	78c.

Discount.....

## SHOES and ELBOWS

ROUND or SQUARE, Per Dozen

Sizes	No. 1	No. 2.	No. 3.
2 Inch	\$ 5.00	\$ 7.00	\$ 9.00
3 "	7.00	9.00	11.00
4 "	9.00	11.00	13.00
5 "	15.00	17.00	19.00
6 "	17.00	19.00	21.00

Prices on Shoes and Elbows are the same in any weight

Discount.....

## SPIRAL COPPER PIPE.

1 ½ inch, per foot,	.....	19 cents
2 "	"	.....22 "
2 ½ "	"	.....25 "
3 "	"	.....28 "
4 "	"	.....35 "
5 "	"	.....42 "
6 "	"	.....49 "

Discount.....

**PLAIN ROUND**  
**TEN FOOT LOCK SEAM PIPE,**  
 —FOR—  
**LEADER or CONDUCTOR SPOUTS,**  
 . . . . VENTILATING, . . . .  
**HEATING BLAST, and BLOWER PIPE,**  
 and for  
**PLUMBERS USE**  
**IN VENTILATING.**

Each Ten (10) Foot Length is a Single Perfect Piece.

No cross seams to come apart or break off as in other pipes  
 It is the **HEAVIEST, STRONGEST AND BEST PIPE MADE.**

**TRADE PRICE LIST.**

Diameter.	No. 28 Gauge Galvanized Per Foot.
1 ½ inch .....	\$ .11
2 inch .....	.13
2 ½ inch .....	.14
3 inch .....	.15
3 ½ inch .....	.18
4 inch .....	.20
5 inch .....	.25
6 inch .....	.30

(In crates, nested, 500 feet.)

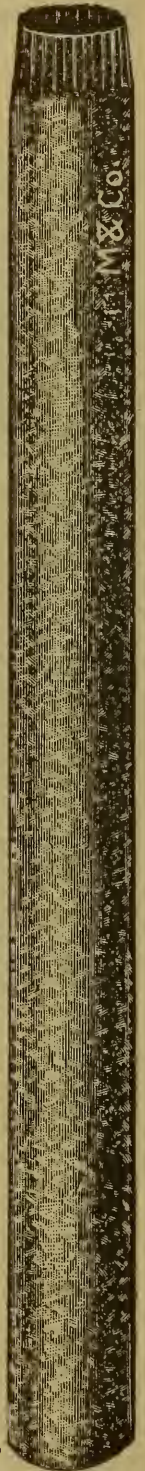
DISCOUNT.....Per Cent.

Prices quoted upon application on larger sizes.

Crates no charge.

Nested Pipe takes lower freight rates than not nested.

For Galvanized Pipe heavier than No. 28 Gauge, **WRITE FOR PRICES.**

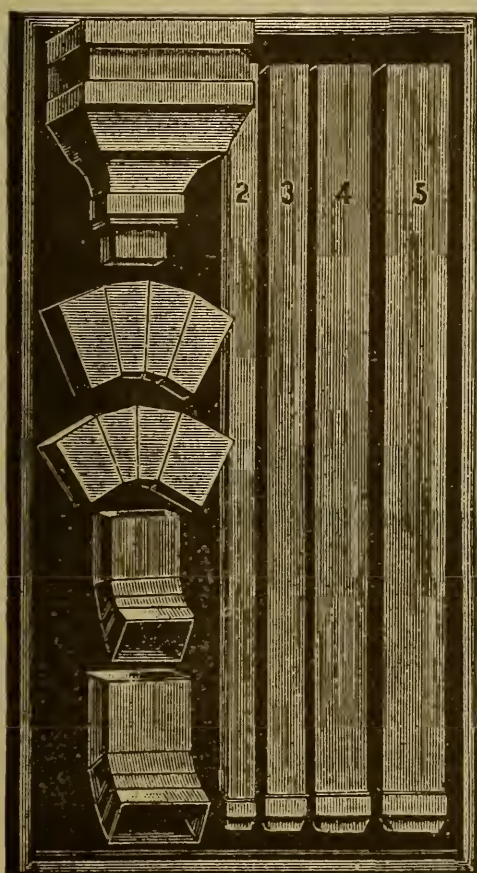




# PEERLESS EXPANDING WATER CONDUCTOR

Always straight and easy to make connections, bends and angles, neat and durable, always free from clusters of ice at sections. Will not burst.

THE ONLY PLAIN SQUARE CONDUCTOR PIPE MADE.



## PRICE LIST.

	GALV. IRON.	COPPER.
2 in.	Per ft., \$0 12	Per ft., \$0 35
3 "	" 15	" 45
4 "	" 20	" 60
5 "	" 25	" 80
6 "	" 30	" 1 00
Discount.....		

## SHOES.

	GALV. IRON.	COPPER.
2 in.	Per doz., \$3 50	Per doz., \$ 9 50
3 "	" 3 75	" 10 50
4 "	" 4 50	" 11 50
5 "	" 5 25	" 12 50
6 "	" 5 75	" 13 50
Discount.....		

## SPOUT HEADS.

	GALV. IRON.	COPPER.
3 in.	Each, \$2 00	Each, \$4 00
4 "	" 2 50	" 5 00
5 "	" 3 00	" 6 00
6 "	" 3 50	" 7 00
Discount.....		

## ELBOWS.

### GALV. IRON, per doz.

	No. 1.	No. 2.	No. 3.
2 in.	\$2 50	\$3 00	\$3 50
3 "	2 75	3 25	3 75
4 "	3 50	4 00	4 50
5 "	4 25	4 75	5 25
6 "	4 75	5 25	5 75
Discount.....			

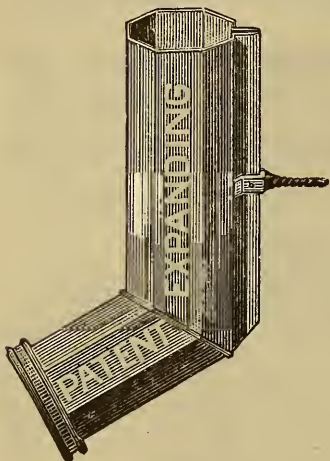
### COPPER ELBOWS, per doz.

2 in.	\$ 8 50	\$ 9 00	\$ 9 50
3 "	9 50	10 00	10 50
4 "	10 50	11 00	11 50
5 "	11 50	12 00	12 50
6 "	12 50	13 00	13 50
Discount.....			

Made in 8 ft. lengths, without cross-seams of 27 gauge best Bloom Galvanized Iron, with machine-set tapering corners, making connection easy.

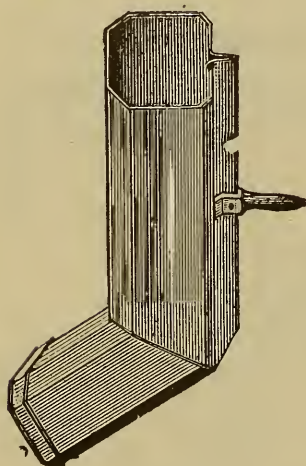
# OCTAGON AND CHAMFERED Expanding Conductors.

Furnished in 8 Foot Seamless Lengths.



## Octagon Expanding Conductor

Regular Sizes.	Per Foot.
2 inch, Galvanized Iron .....	\$ .12
3 inch, Galvanized Iron .....	.15
4 inch, Galvanized Iron .....	.20
5 inch, Galvanized Iron .....	.25
6 inch, Galvanized Iron .....	.30

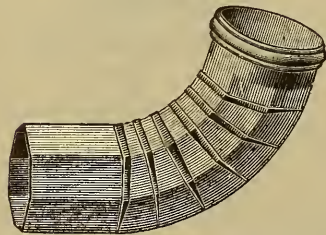


## Chamfered Expanding Conductor.

	Per Foot.
2 x 3 inch, Galvanized Iron .....	\$ .16
3 x 4 inch, Galvanized Iron .....	.20
4 x 5 inch, Galvanized Iron .....	.25
4 x 6 inch, Galvanized Iron .....	.30
5 x 6 inch, Galvanized Iron .....	.32

DISCOUNT.....Per Cent,

## ELBOWS.



2 inch—No. 1.....	\$2.50	No. 2.....	\$3.00
3 inch—No. 1.....	2.75	No. 2.....	3.25
4 inch—No. 1.....	3.50	No. 2.....	4.00
5 inch—No. 1.....	4.25	No. 2.....	4.75
6 inch—No. 1.....	5.25	No. 2.....	5.75

DISCOUNT.....Per Cent.

Crates at cost.

## MALLEABLE FASTENERS.

USED ONLY FOR ABOVE PIPES.



For Wood Walls.



For Brick Walls.

Price, each, net .....5 cents.

When ordering, always state whether for  
Wood or Brick.

# “Roots” Spiral Riveted Pipe

For House Leaders, Blower and Ventilator Pipes, Etc.



PRICE PER LINEAL FOOT.

With Plain or Crimped End.

INSIDE DIAMETER.	GALVANIZED.	INSIDE DIAMETER.	GALVANIZED.
2 inch	\$ .14	4 inch	\$ .25
2½ “	.17	5 “	.30
3 “	.19	6 “	.38
3½ “	.21		

In lengths of 10 feet and less.

DISCOUNT .....

## Ritchie's Patent Spiral Lock-Seam Pipe.



For Plumbers' Ventilator Pipes, Conductors or Water Spouts,

And for all classes of work where lightness and strength are desirable, Spiral Pipe is superior to any other. It is rounder, stiffer, and more easily fitted than any other, and therefore unequalled for use in ventilation by plumbers and others.

Each 10 ft. length is a single, perfect piece, not short lengths soldered together, for soldered pipes easily break apart.

One end of each length is enlarged so that the coupled pipe is, throughout, of even size inside. It is galvanized after it is made.

### TRADE PRICE LIST.

DIAMETER.	GALVANIZED, PER FOOT.	TIN, PER FOOT.
1½ inch, .	12 cents.	7 cents.
2 “ .	14 “	9 “
2½ “ .	17 “	10 “
3 “ .	19 “	11 “
4 “ .	25 “	15 “
5 “ .	30 “	21 “
6 “ .	38 “	28 “

DISCOUNT .....

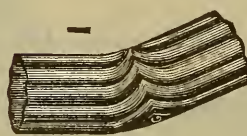
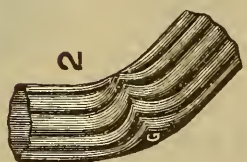
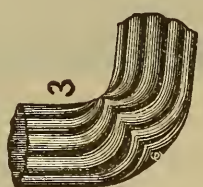


# "AUSTIN'S"

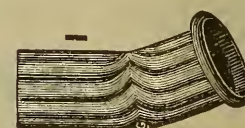

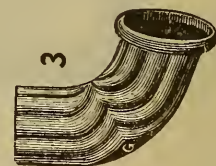
## Stamped Corrugated Expanding Elbows and Shoes.

PRICE LIST  
OF  
PATENT-STAMPED  
Round Elbows and Shoes  
ADOPTED FEBRUARY 1ST, 1894

### ELBOWS

		
1	2	3
2 inch Round, each	2 inch Round, either angle, each	2 inch Round, either angle, each
3 " " "	" " "	" " "
4 " " "	" " "	" " "
5 " " "	" " "	" " "
6 " " "	" " "	" " "
		25 cents
		30 "
		40 "
		50 "
		60 "

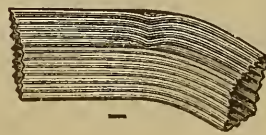
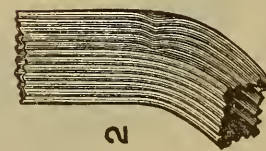
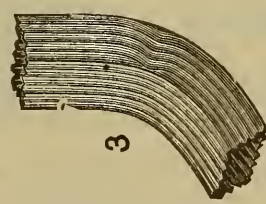
### SHOES

		
1	2	3
2 inch Round, either angle, each	2 inch Round, either angle, each	2 inch Round, either angle, each
3 " " "	" " "	" " "
4 " " "	" " "	" " "
5 " " "	" " "	" " "
6 " " "	" " "	" " "
		30 cents
		36 "
		48 "
		60 "
		72 "

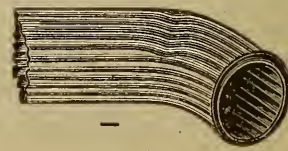
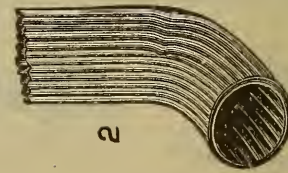
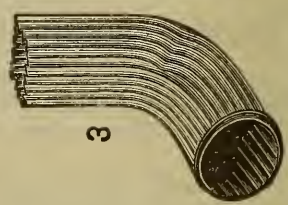
Discount

PRICE LIST  
OF  
PATENT-STAMPED  
Square Elbows and Shoes  
ADOPTED FEBRUARY 1ST, 1894

### ELBOWS

		
1	2	3
2 inch Square, either angle, each	2 inch Square, either angle, each	2 inch Square, either angle, each
3 " " "	" " "	" " "
4 " " "	" " "	" " "
5 " " "	" " "	" " "
6 " " "	" " "	" " "
		30 cents
		36 "
		48 "
		60 "
		72 "

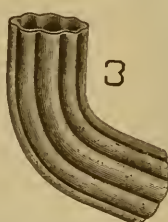
### SHOES

		
1	2	3
2 inch Square, either angle, each	2 inch Square, either angle, each	2 inch Square, either angle, each
3 " " "	" " "	" " "
4 " " "	" " "	" " "
5 " " "	" " "	" " "
6 " " "	" " "	" " "
		40 cents
		48 "
		60 "
		72 "
		84 "

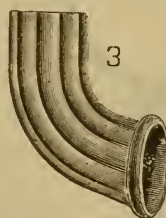
Discount

# Galvanized Expanding Corrugated "L. & R." Elbows and Shoes.

## ROUND ELBOWS.



## ROUND SHOES.

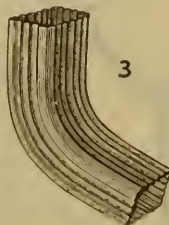
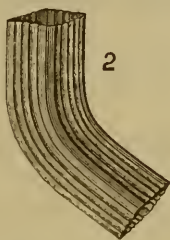


Elbows—each

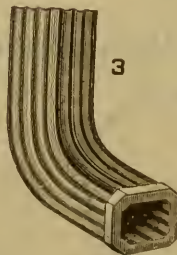
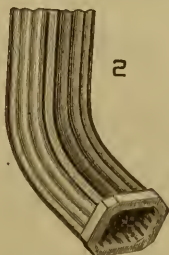
Shoes—each

2 inch.....	25 cents	30 cents.
3 ".....	30 "	36 "
4 ".....	40 "	48 "
5 ".....	50 "	60 "
6 ".....	60 "	72 "

## SQUARE ELBOWS



## SQUARE SHOES



Elbows—each

Shoes—each

2 inch.....	30 cents	40 cents.
3 ".....	36 "	48 "
4 ".....	48 "	60 "
5 ".....	60 "	72 "
6 ".....	72 "	84 "

Discount.....per cent.

When ordering corrugated elbows, always state whether "L. & R."  
or "Austin's" are wanted.

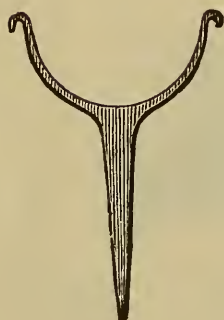
## Galvanized Conductor Strainers.



	PER DOZEN.
2 inch.....	\$1.50
2½ ".....	1.75
3 ".....	2.00
4 ".....	3.00
5 ".....	5.00
6 ".....	6.00

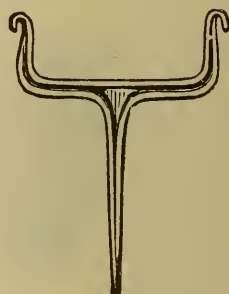
DISCOUNT.....

## Round and Square Wired Hooks.



Price per 100 Tinned.

	2''	3''	4''	5''
For Wood,	\$1.50	\$2.00	\$2.50	\$3.00
" Brick,	2.50	3.00	3.50	4.00



## Corrugated Brick and Wood Hinged Hooks.

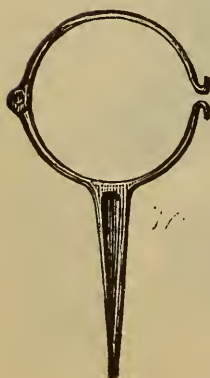


Price per 100 Tinned.

	2''	3''	4''	5''	6''
Short Drive }	\$2.50	\$3.50	\$4.50	\$5.50	
Long Drive }	3.00	4.00	5.00	6.00	
For Brick }	3.50	4.50	5.50	6.50	7.50



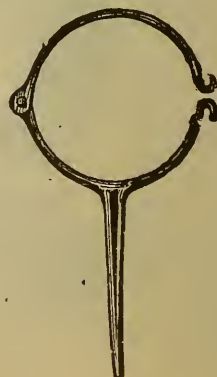
## Plain Round Brick and Wood Hinged Hooks.



PER 100 TINNED.

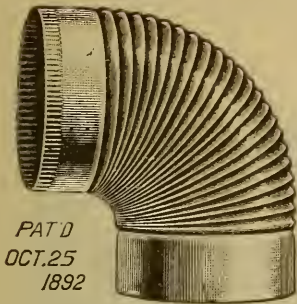
	2''	3''	4''	5''	6''
Short Drive for Wood }	\$2.50	3.50	4.50	5.50	
For Brick }	\$3.50	4.50	5.50	6.50	7.50

DISCOUNT.....





## The "O. H." One-Piece Stove-Pipe Elbows.



	COMMON IRON.	PLANISHED IRON.
3 inch, per doz.....	\$ 70 Net.....	\$1 40 Net
3½ " " .....	80 " .....	1 75 "
4 " " .....	90 " .....	2 00 "
4½ " " .....	1 10 " .....	2 40 "
5 " " .....	1 20 " .....	2 50 "
5½ " " .....	1 25 " .....	2 75 "
5¾ " " .....	1 25 " .....	2 75 "
6 " " .....	1 25 " .....	2 75 "
7 " " .....	1 60 " .....	3 60 "

The common is made of cold rolled steel and when polished looks as well as the planished.



## Small Galvanized Pipe.



For wires, and for many purposes requiring small pipe, where a light but strong, tight, and reliable pipe is needed, we offer a

## Small Lock-Seam Pipe,

Galvanized after it is made. We furnish it to order in any required length up to ten feet.

### LIST PRICES

⅝ inch .....	per ft.....	6 cents
¾ " .....	" .....	6 "
⅞ " .....	" .....	7 "
1 " .....	" .....	7 "
1 ⅛ " .....	" .....	8 "
1 ¼ " .....	" .....	9 "

DISCOUNT.....



## HALL'S CONDUCTOR FASTENERS

Per 100 sets, net, .....\$5.00

## PRICE LIST

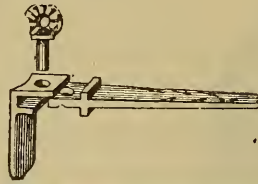
Taking Effect May 1st, 1895.

## The "Austin" Conductor Fastening.

PRICE PER 100, TINNED

No. 1, for brick 3 inch.....	\$4.00
" 2, " " 4 " .....	5.00
" 3, " " 6 " .....	6.00
" 4, for wood.....	3.50
" 5, to nail on wood.....	4.00

DISCOUNT.....



6 INCH



4 INCH



3 INCH.



No 4



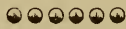
No 5

## Plain Conductor Hooks.

## PRICE LIST

## FOR BRICK WALLS

	BLACK	TINNED
2 inch per 100, net.....	\$1 25	\$1 75
3 " " " " .....	2 00	2 75
4 " " " " .....	3 50	4 25
5 " " " " .....	4 50	6 00
6 " " " " .....	6 00	8 00

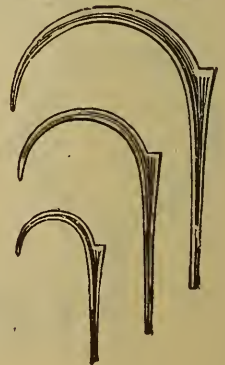
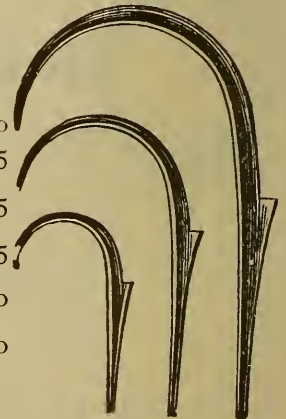


## FOR WOOD

2 inch per 100, net.....	\$ 75	\$1 00
3 " " " " .....	1 50	2 00
4 " " " " .....	2 50	3 00
5 " " " " .....	3 00	4 00

Always state whether Black or Tinned Hooks are wanted, and whether for brick or wood.

DISCOUNT.....



## ... BERGER'S ... Adjustable Conductor Fastener.

PATENTED

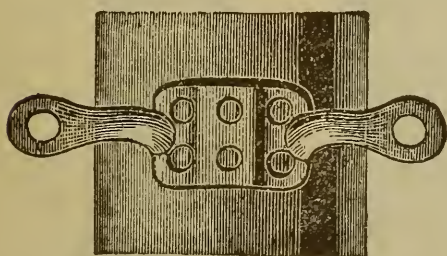
Per 100, complete, tinned.

No. 0,	For brick,	3 inch drive	...	\$3 50
" 1,	" "	4 "	...	4 00
" 2,	" stone	6 "	...	5 00
" 3,	" "	9 "	...	6 50
" 4,	" wood	3 "	...	3 50
" 5,	" "	5 "	...	4 00
" 6,	" "	to screw on	...	3 50

PRICE LIST OF DRIVES ONLY.

4 inches,	...	\$2 00	No. 4,	...	\$1 50
6 "	...	3 00	" 5,	...	2 00
9 "	...	4 50	" 6,	...	1 50

DISCOUNT.....

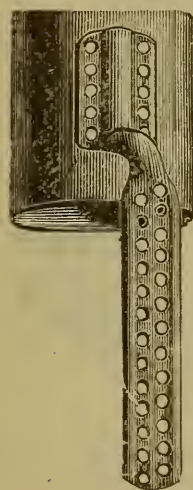


### PIPE CLEATS.

PRICE PER 100.

3 inch, tinned,	...	\$1 50
4 "	...	2 00

This cleat makes a handsome finish on porch columns; no tinner should be without them; they will answer for all kinds of pipe.



### PIPE CLEATS.

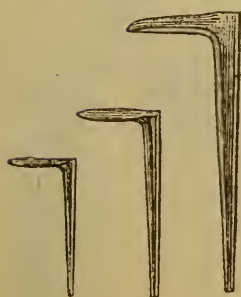
PRICE PER 100.

No. 5, tinned	...	\$2 50
---------------	-----	--------

This cleat is fastened lengthwise for slipped joints and will answer for all sizes or kinds of pipe.

Put up 50 in a package.

The No. 6 is made to set the pipe close up to the wall.



### FLASHING HOOKS.

PRICE PER 100.

Inches	...	1 1/2	2 1/2	3 1/2	5 1/2	7 1/2
Black	...	\$ 25	40	70	1 20	1 70
Tinned	...	\$ 35	55	1 00	1 70	2 50

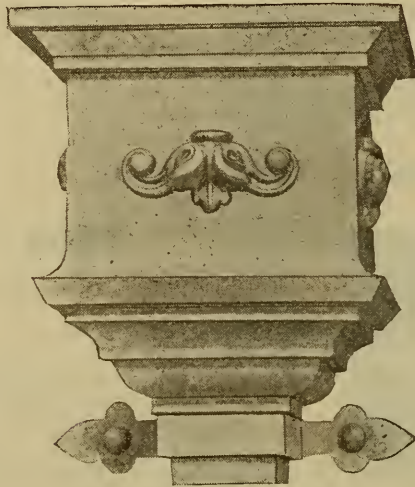
The large size will answer for Square Conductor Pipe.

Discount.....

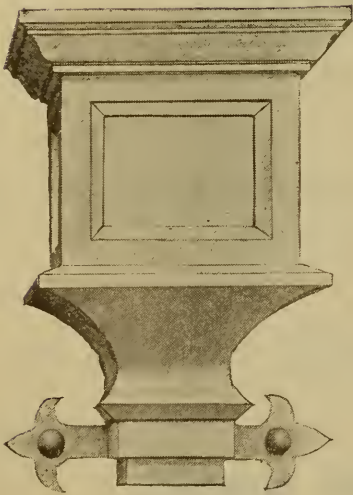


# Ornamental Conductor Heads

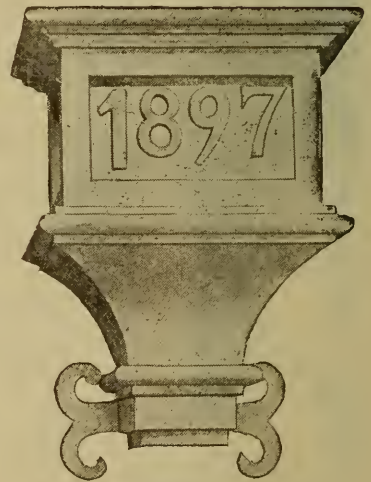
MADE OF  
GALVANIZED IRON.



No. 53. Each \$4.50.



No. 54. Each \$4.50.

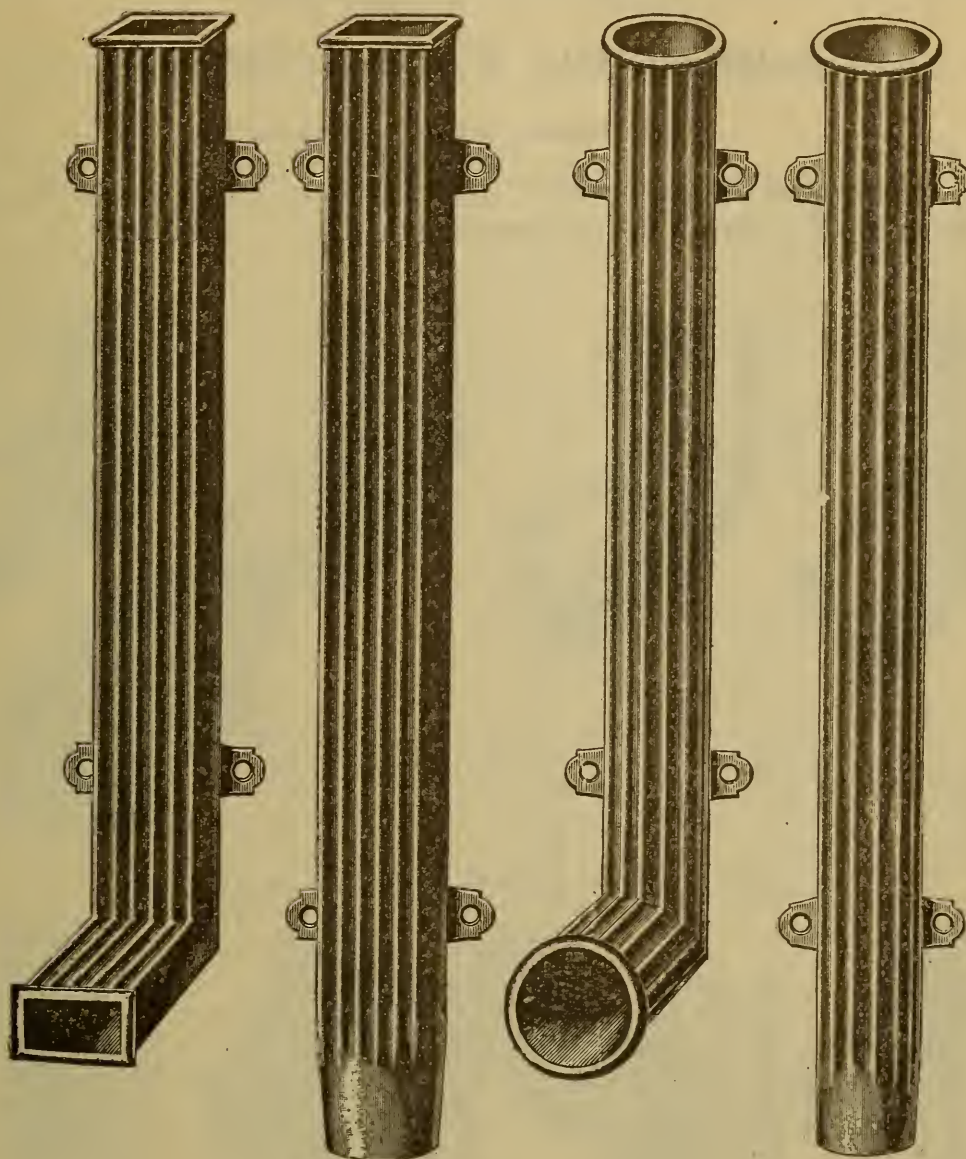


No. 52. Each \$6.00.

*Discount.....*

Prices for Copper quoted on application, and Special Designs made to order on receipt of Detailed Sketch.

CAST IRON LEADER SHOES AND SEWER CONNECTIONS.



No. 4.

No. 3.

No. 1.

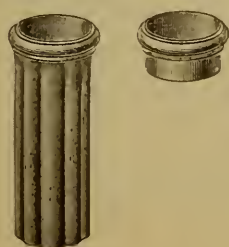
No. 2.

PRICE-LIST.

No. 1 or No. 2, 55 inch . . . . .	. 3 inch, \$2 50 . . 4 inch, \$3 75
No. 3 or No. 4, 48 inch . . . . .	. 3 inch, 3 50 . . 4 inch, 4 50
Discount . . . . .	

CONDUCTOR HEAD.

The cut show this Conductor Head, first alone, then slipped into the top of a Corrugated Conductor. It makes a cheap, attractive and convenient finish, no solder being needed.



Price of each size same as a foot of  
Corrugated Pipe.

Discount . . . . .

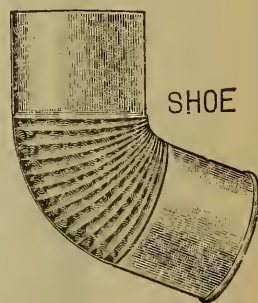
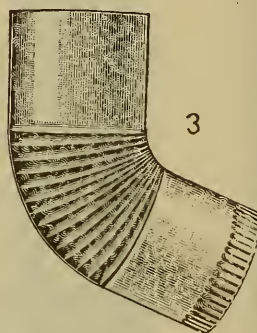
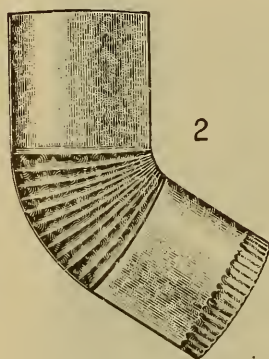
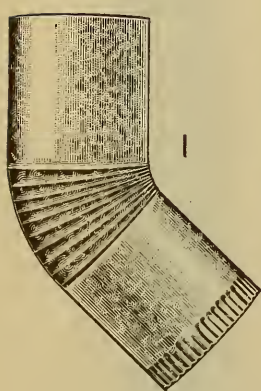




## The O. H. One Piece Conductor Pipe Elbows

Plain Round and Corrugated

Are made of the best material. Unexcelled for Strength and Durability. Will not break or come apart.



TIN.

	ELBOWS.
2 inch	20c each
2 1/2 "	22 "
2 3/4 "	25 "
3 "	25 "
3 1/2 "	30 "
4 "	35 "
5 "	42 "
6 "	50 "

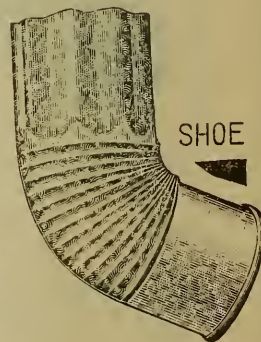
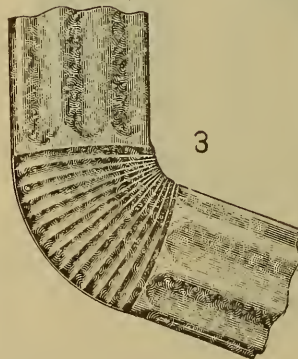
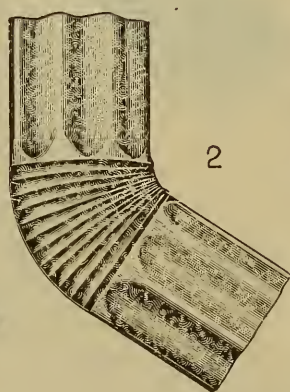
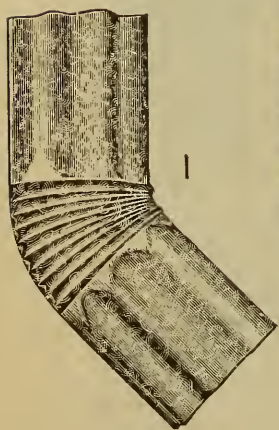
	SHOES.
	25c each
27 "	"
30 "	"
30 "	"
35 "	"
40 "	"
50 "	"
60 "	"

GALVANIZED.

	ELBOWS.
	25c each
27 "	"
30 "	"
30 "	"
35 "	"
40 "	"
50 "	"
60 "	"

	SHOES.
	30c each
32 "	"
36 "	"
36 "	"
42 "	"
48 "	"
60 "	"
72 "	"

Discount,.....per cent,



NOS. 1, 2 AND 3  
ROUND ELBOWS, EACH.

SIZE.	
2 inch, corrugated, galvanized,	
3 inch, " "	
4 inch, " "	
5 inch, " "	
6 inch, " "	

25 cts.
30 cts.
40 cts.
50 cts.
60 cts.

SHOES EACH.
30 cts.
36 cts.
48 cts.
60 cts.
72 cts.

Discount,.....per cent.



# 5 PIECE PHILADELPHIA Curved Elbows, FOR STOVE, HEATER AND CONDUCTOR PIPES.

## CHARCOAL IRON.

4 inch	per doz.....\$1 80	5½ inch	per doz.....\$2 25
4½ "	" ..... 1 95	6 "	" ..... 2 40
5 "	" ..... 2 10	7 "	" ..... 3 75

## GENUINE RUSSIA IRON.

4 inch	per doz.....\$4 00	8 inch	per doz.....\$16 00
4½ "	" ..... 5 00	8½ "	" ..... 16 00
5 "	" ..... 6 00	8¾ "	" ..... 18 00
5½ "	" ..... 7 00	9 "	" ..... 18 00
6 "	" ..... 8 00	10 "	" ..... 20 00
7 "	" ..... 10 00		

## TIN, OR GALVANIZED IRON.

2 inch	per doz.....\$2 00	7 inch	per doz.....\$ 7 00
3 "	" ..... 2 50	8 "	" ..... 8 00
4 "	" ..... 3 25	8½ "	" ..... 10 00
4¼ "	" ..... 4 00	8¾ "	" ..... 12 00
5 "	" ..... 4 75	9 "	" ..... 12 00
5½ "	" ..... 5 50	10 "	" ..... 13 50
6 "	" ..... 6 25	12 "	" ..... 20 00

Discount, . . . . . Per cent.

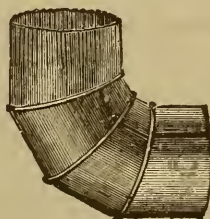
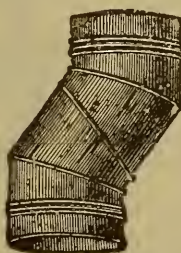


## 4 Piece Stiff Elbows

Made of Cleaned Iron,  
Price per Doz. Net.

4 inch	.....\$ 65
4½ "	..... 70
5 "	..... 75
5½ "	..... 85
6 "	..... 90

## 4 Piece Patent Adjustable Elbows.



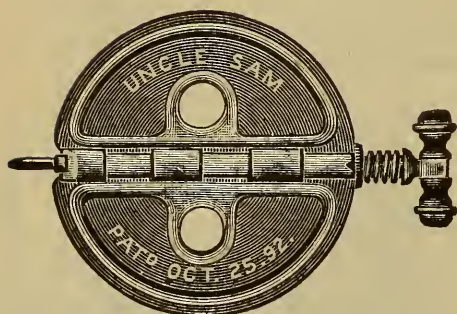
## TRADE PRICE LIST.

Size.	Galvanized Iron. Per Doz.	Bright Tin. Per Doz.
1½ inch.....	\$ 2.40	\$ 1.80
2 inch.....	2.40	1.80
2½ inch.....	3.00	2.40
3 inch.....	3.60	2.40
3½ inch.....	4.20	3.60
4 inch.....	4.80	3.60
4½ inch.....	5.40	4.80
5 inch.....	6.60	4.80
5½ inch.....	7.80	6.60
6 inch.....	8.40	6.60
7 inch.....	10.20	8.40
8 inch.....	13.80	10.80
9 inch.....	15.00	12.60
10 inch.....	16.80	14.40

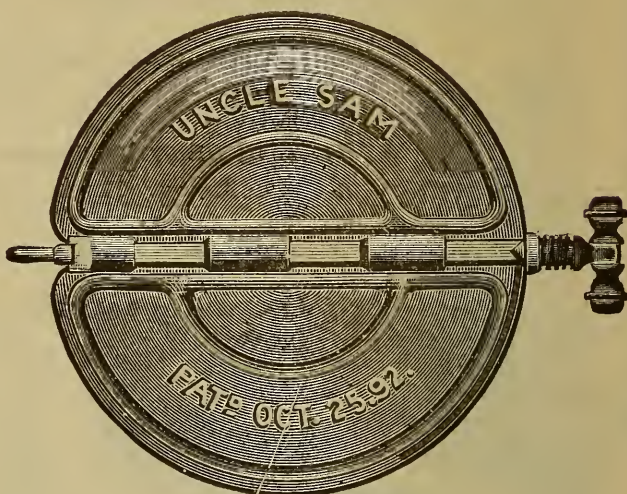
DISCOUNT.....per cent.

These Elbows can be adjusted to any angle between a straight line and a right angle.

# The Uncle Sam Damper.



Smoke-Pipe Damper.



Heater-Pipe Damper.

This Damper eclipses anything heretofore placed on the market. The handle is enameled wood, will not heat, rigidly clamped and cannot come off. The spring is not affected by heat, and will always remain the same.

The stem is malleable iron, pointed, and is easily driven through the pipe. The Damper Plate is made of cold-rolled pickled steel, corrugated to stiffen it and prevent warping.

We call special attention to lightness and strength of these Dampers and their desirability for Heater Pipes. The nuisance of buying Damper clips and making your own dampers is avoided, and you have a better article ready for use at less cost.

**The difference in weight pays the freight.**

## PRICE LIST.

Inches .....	7	8	8½	9	10	10½
Hot-Air, per dozen.....	\$1.48	\$1.64	\$1.75	\$1.82	\$2.00	\$2.12
Inches .....	4	4½	5	5½	6	7
Smoke-Pipe, per dozen.....	\$.84	\$.94	\$1.00	\$1.10	\$1.20	\$1.48
Discount,.....per cent.						

## PEERLESS TWIN HOT-AIR ELBOW.

PRICE PER DOZEN.

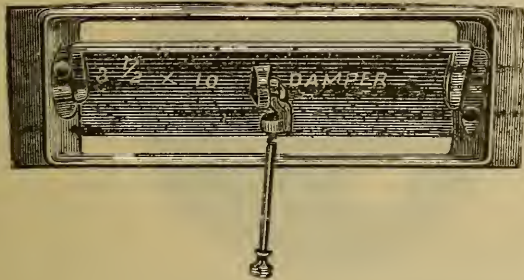
	Galvanized	
	IX Tin	Iron
6 inch.....	\$ 4 80	\$ 6 00
7 ".....	6 00	7 20
8 ".....	7 20	9 60
8½ ".....	7 20	9 60
9 ".....	8 50	10 52
10 ".....	9 60	12 00
12 ".....	13 20	14 25

The advantages in using the Twin Elbow are many; it can be adjusted to any angle required, and disconnected, can be used as two separate elbows.

The trade will readily see the convenience and economy in using the Twin Elbows.



# Oblong Square Corner Hot-Air Dampers.

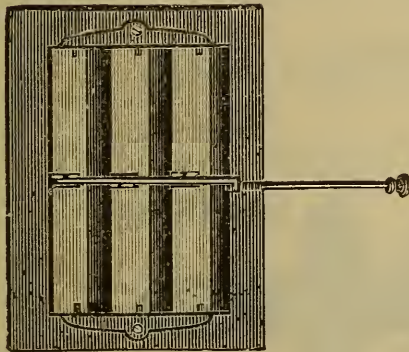


## FOR TIN FLUES.

2 3/4 x 8 in. \$ .20	4 x 8 in.....\$ .26
2 3/4 x 9 in. .24	4 x 9 in..... .30
3 x 8 in. .22	4 x 10 in..... .32
3 1/2 x 8 in. .24	4 x 12 in..... .34
3 1/2 x 10 in. .26	

DISCOUNT ..... per cent.

## SQUARE DAMPERS.

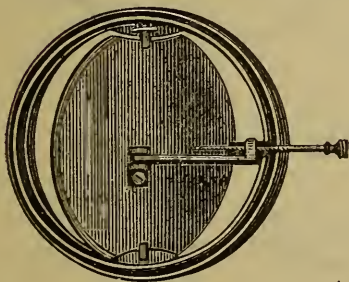


## FOR BRICK FLUES.

4 x 6 inch, 2 slats, each.....	\$ .23
4 x 9 inch, 2 slats, each.....	.26
6 x 6 inch, 3 slats, each.....	.28
6 x 9 inch, 3 slats, each.....	.34
6 x 12 inch, 3 slats, each.....	.40
8 x 8 inch, 3 slats, each.....	.38
9 x 9 inch, 3 slats, each.....	.46

DISCOUNT ..... per cent.

## ROUND DAMPERS.

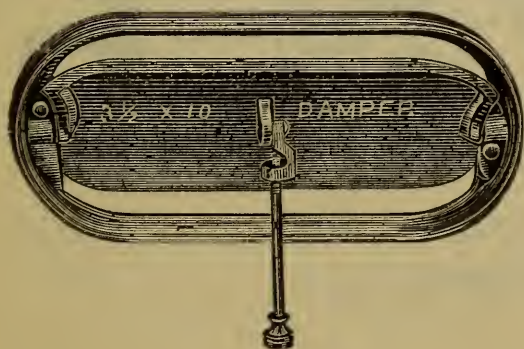


## FOR TIN FLUES.

6 inch .....	\$ .38
7 inch .....	.43
8 inch .....	.46
8 5/8 inch .....	.50
9 inch .....	.55

DISCOUNT ..... per cent.

## OVAL HOT-AIR DAMPERS.



2 3/4 x 9 inch.....	\$ .30
3 1/2 x 10 inch.....	.38
4 x 9 inch.....	.40
4 x 10 inch.....	.40
4 x 12 inch.....	.46
6 x 12 inch.....	.54

DISCOUNT ..... per cent.

We also make the above dampers to turn lengthwise, the handle turning instead of pulling out.



## Plain Dampers.

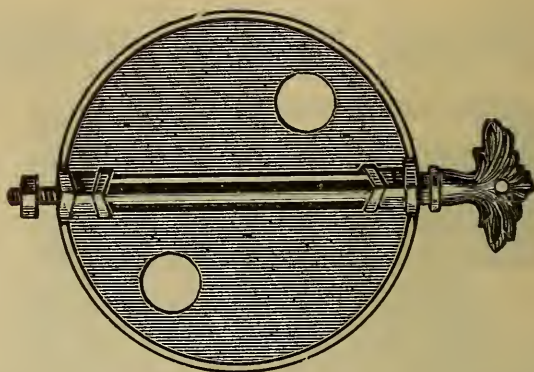
### SIZES

4 inch.	4½ inch.	5 inch.
5½ "	6 "	7 "

Price per pound .....\$

These dampers are all gauged to a true size to fit the pipe, and will not turn in the rods.

Hot Air Sizes :—7, 8, 8½, 9, 10, 11 and 12 inches.



## The B. B. Patent Damper Clip.

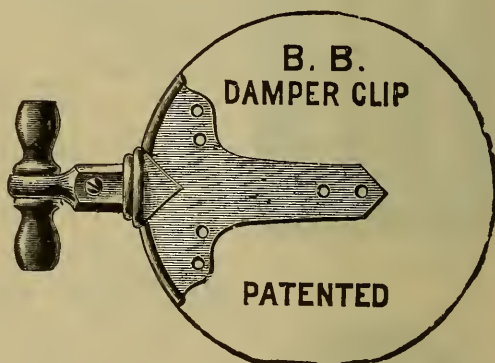
Patented March 13, 1894.

To remove Handle, simply loosen Nut **half way**—unnecessary to remove Bolt.

**Positively the best and cheapest.**

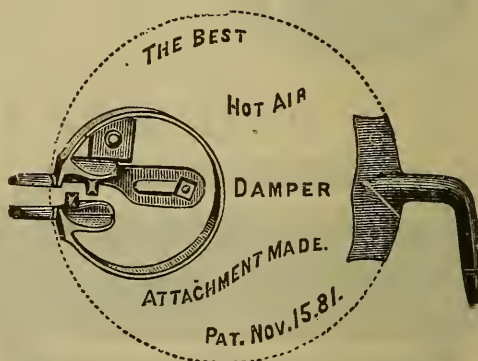
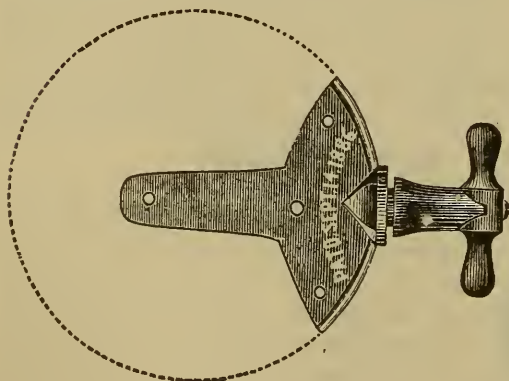
Send for Sample and be Convinced

Price, per dozen.....\$ .65  
 " " gross ..... 7.20



## Buffalo Damper Clips.

## Damper Attachment



With Black Enameled Wood Handles

No. 1, per dozen.....\$1.25

DISCOUNT.....per cent

Price, per dozen .....\$1.00

NICKEL DAMPER KNOBS.



Per dozen, net .....\$ 60.

DAMPER RODS.

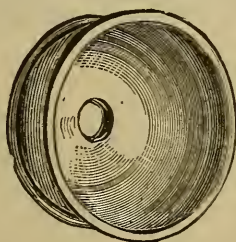


Up to 6 inches, per doz. net. ....\$ .35  
7 inch to 12 inch, per doz, net..... .40

NICKEL T HANDLES.

Per dozen, net..... \$ 1.80

SHALLOW PORCELAIN CUPS.



Per dozen, net,..... \$ .65

POLISHED TIN CUPS.

Per dozen..... \$

NICKEL PLATED CUPS.

Per dozen ..... \$

OVAL RIMMED BOILER COVERS.

Nos.	7	8	9
Ins.	10 x 19 $\frac{3}{4}$	11 $\frac{3}{4}$ x 21 $\frac{7}{8}$	12 $\frac{7}{8}$ x 23 $\frac{7}{8}$
Per doz.	\$ .85	95	1 05

FLAT EDGE BOILER COVERS.

Sizes,	6	7	8	9
Nos.	06	07	08	09
Ins.	9 $\frac{1}{2}$ x 18 $\frac{1}{4}$	10 $\frac{1}{2}$ x 20 $\frac{1}{4}$	12 $\frac{3}{8}$ x 22 $\frac{1}{2}$	13 $\frac{3}{8}$ x 24 $\frac{1}{2}$
Per doz.	\$ .50	60	75	85

LEATHER PLUNGERS FOR BOAT PUMPS,

DOUBLE CLAPPER VALVES.

PUMP VALVES.

Black and Tinned Iron Rivets.

(Revised List—Adopted November 1st, 1894.)

In Packages of 1000—Price per 1000.

In Bulk—Prices per Pound.

SIZE.	BLACK.	TINNED.	BLACK.	TINNED.
8 oz.	\$ 20	\$ 24	\$ 38	\$ 45
10 "	22	25	34	40
12 "	24	28	31	37
14 "	26	30	29	35
1 lb.	27	33	26	32
1 1/4 "	29	37	23	29
1 1/2 "	33	42	22	28
1 3/4 "	37	48	21	27
2 "	42	54	20	26
2 1/2 "	55	69	20	26
3 "	60	78	19	25
3 1/2 "	70	81	19	25
4 "	76	1 00	18	24
5 "	90	1 20	17	23
6 "	1 08	1 44	17	23
7 "	1 26	1 68	17	23
8 "	1 44	1 92	17	23
9 "	1 53	2 07	16	22
10 "	1 75	2 35	16	22
12 "	1 98	2 70	15 1/2	21 1/2
14 "	2 31	3 15	15 1/2	21 1/2
16 "	2 64	3 60	15 1/2	21 1/2

Oval or Countersunk Heads or extra lengths, 5c. per 1,000 in addition to the above prices.

Discount.....

TRUNK RIVETS, TINNED.				COOPER'S RIVETS.			
No. 9 Wire.				HEAVY, MEDIUM AND LIGHT			
1-4 in. long	per lb.	\$ 27	1d,	per lb.	\$ 16 1/2		
5-16 " "	"	27	2d,	"	16		
3-8 " "	"	26	3d, 4d,	"	15 1/2		
7-16 " "	"	25	5d,	"	15 1/2		
1-2 " " and longer	"	24	6d,	"	15		
Discount.....				Discount.....			

RIVETS IN BULK.

(Revised List—Adopted November 1st, 1894.)

Any Style of Head.

Cents per Pound—List Price.

DIAMETER	$\frac{7}{16}$	$\frac{3}{8}$	$\frac{11}{32}$	$\frac{5}{16}$	1	2	3	$\frac{1}{4}$	4	5	6	$\frac{3}{16}$	7	8	9	10	11	12	13	14
$\frac{1}{2}$ inch and longer.....	15	15	15	$15\frac{1}{2}$	$15\frac{1}{2}$	$15\frac{1}{2}$	$15\frac{1}{2}$	$15\frac{1}{2}$	$15\frac{1}{2}$	16	16	16	$16\frac{1}{2}$	17	18	19	20	21	25	27
$\frac{3}{4}$ inch long .....	16	16	16	$16\frac{1}{2}$	$16\frac{1}{2}$	$16\frac{1}{2}$	$16\frac{1}{2}$	17	17	17	17	17	18	18	19	20	22	24	27	30
" " .....	16	16	16	$16\frac{1}{2}$	$16\frac{1}{2}$	$16\frac{1}{2}$	17	17	17	17	17	17	18	18	19	20	21	24	26	30
" " .....	16	16	16	$16\frac{1}{2}$	$16\frac{1}{2}$	$16\frac{1}{2}$	17	17	17	17	17	17	18	18	19	20	22	26	28	33
" " .....	16	16	16	$16\frac{1}{2}$	$16\frac{1}{2}$	$16\frac{1}{2}$	17	17	17	17	17	17	18	18	19	20	23	27	29	34
" " .....	16	16	16	$16\frac{1}{2}$	$16\frac{1}{2}$	$16\frac{1}{2}$	17	17	17	17	17	17	18	18	19	20	21	25	28	30
" " .....	16	16	16	$16\frac{1}{2}$	$16\frac{1}{2}$	$16\frac{1}{2}$	17	17	17	17	17	17	18	18	19	20	23	27	30	35
" " .....	16	16	16	$16\frac{1}{2}$	$16\frac{1}{2}$	$16\frac{1}{2}$	17	17	17	17	17	17	18	18	19	20	23	27	30	37
" " .....	16	16	16	$16\frac{1}{2}$	$16\frac{1}{2}$	$16\frac{1}{2}$	17	17	17	17	17	17	18	18	19	20	23	27	30	50
" " .....	16	16	16	$16\frac{1}{2}$	$16\frac{1}{2}$	$16\frac{1}{2}$	17	17	17	17	17	17	18	18	19	20	23	27	30	52
" " .....	16	16	16	$16\frac{1}{2}$	$16\frac{1}{2}$	$16\frac{1}{2}$	17	17	17	17	17	17	18	18	19	20	23	27	30	55
" " .....	16	16	16	$16\frac{1}{2}$	$16\frac{1}{2}$	$16\frac{1}{2}$	17	17	17	17	17	17	18	18	19	20	23	27	30	58
" " .....	16	16	16	$16\frac{1}{2}$	$16\frac{1}{2}$	$16\frac{1}{2}$	17	17	17	17	17	17	18	18	19	20	23	27	30	58
" " .....	16	16	16	$16\frac{1}{2}$	$16\frac{1}{2}$	$16\frac{1}{2}$	17	17	17	17	17	17	18	18	19	20	23	27	30	63
" " .....	16	16	16	$16\frac{1}{2}$	$16\frac{1}{2}$	$16\frac{1}{2}$	17	17	17	17	17	17	18	18	19	20	23	27	30	65
Tin'd or Cop'd Belt Rivets & Burrs, any lgth.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tin'd or Cop'd Belt Rivets & Burrs, $\frac{1}{2}$ lb bxs.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pointed Hame Rivets, any length .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Black Swedes Iron Burrs .....	23	23	23	23	23	23	23	23	24	25	28	30	31	34	35	36	42	42	42	45
Tinned Swedes Iron Burrs .....	29	29	29	29	29	29	29	29	30	31	34	34	36	39	40	41	42	48	48	51



# STOVE BOLTS.

PRICE PER HUNDRED.

## FLAT HEAD.

## ROUND HEAD.

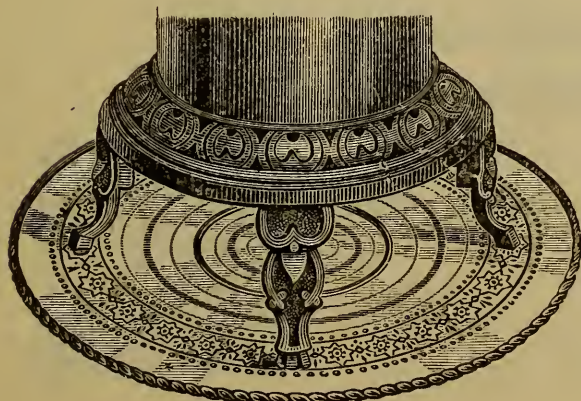
Diam.	$\frac{5}{32}$	$\frac{3}{16}$	$\frac{7}{32}$	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{5}{32}$	$\frac{3}{16}$	$\frac{7}{32}$	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$
Length												
$\frac{3}{8}$ in.	\$0 60	\$0 60					\$0 85	\$0 85	\$0 90			
$\frac{1}{2}$ "	60	60	\$0 62	\$0 65			85	85	90	\$0 95		
$\frac{5}{8}$ "	60	60	62	65			85	85	90	95		
$\frac{3}{4}$ "	60	60	62	65	\$1 05	\$2 20	85	85	90	95	\$1 35	\$2 50
$\frac{7}{8}$ "	65	65	67	70	1 10	2 20	90	90	95	1 00	1 40	2 55
1 "	65	65	67	70	1 10	2 20	90	90	95	1 00	1 45	2 60
$1\frac{1}{8}$ "	70	70	72	75	1 15	2 20	95	95	1 00	1 05	1 50	2 65
$1\frac{1}{4}$ "	70	70	72	75	1 15	2 20	95	95	1 00	1 05	1 55	2 70
$1\frac{3}{8}$ "	75	75	77	80	1 20	2 20	1 00	1 00	1 05	1 10	1 60	2 75
$1\frac{1}{2}$ "	75	75	77	80	1 20	2 20	1 00	1 00	1 05	1 10	1 65	2 80
$1\frac{3}{4}$ "	80	80	82	85	1 25	2 20	1 05	1 05	1 10	1 15	1 70	2 85
2 "	85	85	87	90	1 30	2 20	1 10	1 10	1 15	1 20	1 75	2 90
$2\frac{1}{4}$ "		90	92	95	1 35	2 30		1 15	1 20	1 25	1 80	3 00
$2\frac{1}{2}$ "		95	97	1 00	1 40	2 40		1 20	1 25	1 30	1 85	3 10
$2\frac{3}{4}$ "		1 00	1 02	1 05	1 45	2 50		1 25	1 30	1 35	1 90	3 20
3 "		1 05	1 07	1 10	1 50	2 60		1 30	1 35	1 40	1 95	3 30
$3\frac{1}{4}$ "		1 10	1 12	1 15	1 55	2 70		1 35	1 40	1 45	2 00	3 40
$3\frac{1}{2}$ "		1 15	1 17	1 20	1 60	2 80		1 40	1 45	1 50	2 05	3 50
$3\frac{3}{4}$ "		1 20	1 22	1 25	1 65	2 90		1 45	1 50	1 55	2 10	3 60
4 "		1 25	1 27	1 30	1 70	3 00		1 50	1 55	1 60	2 15	3 70
$4\frac{1}{4}$ "		1 30	1 32	1 35	1 75	3 10		1 55	1 60	1 65	2 20	3 80
$4\frac{1}{2}$ "		1 35	1 37	1 40	1 80	3 20		1 60	1 65	1 70	2 25	3 90
$4\frac{3}{4}$ "		1 40	1 42	1 45	1 85	3 30		1 65	1 70	1 75	2 30	4 00
5 "		1 45	1 47	1 50	1 90	3 40		1 70	1 75	1 80	2 35	4 10
$5\frac{1}{4}$ "		1 50	1 52	1 55	1 95	3 50		1 75	1 80	1 85	2 40	4 20
$5\frac{1}{2}$ "		1 55	1 57	1 60	2 00	3 60		1 80	1 85	1 90	2 45	4 30
$5\frac{3}{4}$ "		1 60	1 62	1 65	2 05	3 70		1 85	1 90	1 95	2 50	4 40
6 "		1 65	1 67	1 70	2 10	3 80		1 90		2 00	2 55	4 50
$6\frac{1}{4}$ "		1 70		1 75	2 15	3 90		1 95		2 05	2 60	4 60
$6\frac{1}{2}$ "		1 75		1 80	2 20	4 00		2 00		2 10	2 65	4 70

Discount, in Papers.....per cent. in Bulk.....per cent.

## SINK BOLTS.

Length	Diameter	Price	Length	Diameter	Price	Length	Diameter	Price
1 in.	$\frac{1}{4}$ in.	\$1 30	2 in.	$\frac{1}{4}$ in.	\$1 50	3 in.	$\frac{1}{4}$ in.	\$1 70
$1\frac{1}{4}$ "	$\frac{1}{4}$ "	1 35	$2\frac{1}{4}$ "	$\frac{1}{4}$ "	1 55	$3\frac{1}{2}$ "	$\frac{1}{4}$ "	1 80
$1\frac{1}{2}$ "	$\frac{1}{4}$ "	1 40	$2\frac{1}{2}$ "	$\frac{1}{4}$ "	1 60	4 "	$\frac{1}{4}$ "	1 90
$1\frac{3}{4}$ "	$\frac{1}{4}$ "	1 45	$2\frac{3}{4}$ "	$\frac{1}{4}$ "	1 65			

## PAPER LINED ZINC BOARDS.



	ROUND.	Doz.	Each
24 inch		\$4 80	\$ 40
26 "		5 40	45
28 "		6 00	50
30 "		6 60	55
32 "		7 20	60
34 "		7 80	65
36 "		8 40	70
	SQUARE.	Doz.	Each
24 inch		\$5 40	\$ 45
26 "		6 00	50
28 "		6 72	56
30 "		7 56	63
32 "		8 64	72
34 "		9 72	81
36 "		10 80	90
	OBLONG	Doz.	Each
28 x 32		\$7 80	\$ 65
30 x 36		9 00	75
32 x 42		10 08	84

# Perforated Metals.

BRASS, COPPER, IRON OR STEEL.

Every description of perforation for Sugar Houses, Malt Kiln Floors,  
Mining Machinery, Grain Dryers, Screens, etc.



## Brass Wire Cloth,

FOR CENTRIFUGAL MACHINES.

Fine Mesh, No. 100 to 120, . . . . .	per sq. ft., \$1.00
Twilled backing, . . . . .	" .60
Plain Backing, . . . . .	" .50

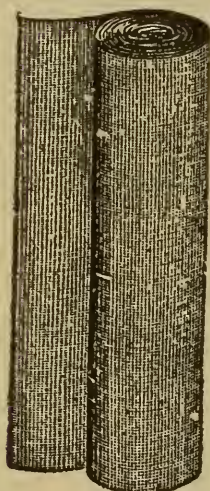
Less . . . per cent Discount.



## Brass Milk Strainer Wire Cloth.

No. 40, . . . . .	per sq. ft.
" 50, . . . . .	"
" 60, . . . . .	"

Each roll contains five feet

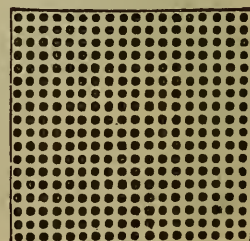


Twilled Brass or Copper Wire Cloth, all meshes  
10 cents per sq. foot advance on price of  
plain cloth.



## Perforated Tin.

10 X 14			14 X 20		
No. 1 per doz.	\$1 10	No. 1 per doz.	\$2.10		
" 2 "	1 05	" 2 "	2.20		
" 3 "	1 00	" 3 "	2.00		
" 4 "	1 00	" 4 "	2.00		



## Railroad Milk Cans—Philadelphia Pattern.

GENUINE "IRON CLAD."



### CANS MADE UP

20	quart	dry	measure,	each,	net	. . . . .	\$2.00
30	"	"	"	"	"	. . . . .	2.50
40	"	"	"	"	"	. . . . .	2.75

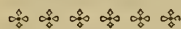
DISCOUNT . . . . .

### STOCK FOR PHILADELPHIA CANS.

20	quart	dry	measure,	per	set,	net	. . .	\$1.68
30	"	"	"	"	"	"	. . .	2.24
40	"	"	"	"	"	"	. . .	2.49

DISCOUNT . . . . .

A set of Philadelphia Milk Can Stock consists of all the parts for making a complete Can, except rivets and solder.



## Fruit Can Tops and Bottoms.

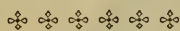
Cover to Cement.

Smooth Edge.

3½ inch opening.

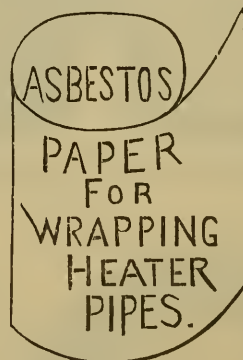
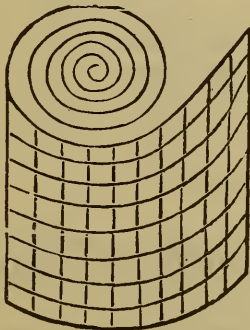
Covers, Breasts, Bottoms complete.

Price per gross, . . . . . \$



## Plastering Wire.

## Asbestos Paper.



Sizes.—12, 14, 16, 18, 20 inches.

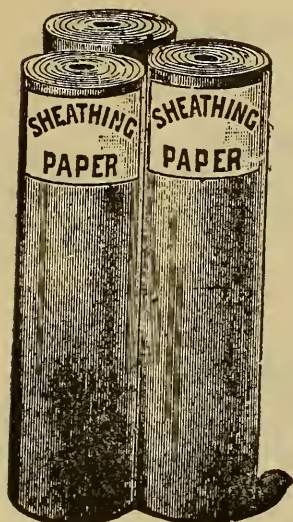
For wrapping Heater Pipes.

36 inches wide.

Price per foot . . . . . \$

Small lots, per lb., net, . . 5cts.





## MERCHANT'S Red Rosin Sized Sheathing Paper

Sq. ft. to lb.	Sq. ft. to roll	Weight per roll	Price per roll
25	500	20	\$.....
20	800	40	\$.....
15	500	30	\$.....
12	500	40	\$.....

## Asbestos Building Felt.

This sheathing is manufactured from a mineral fibre, possessing the highest fire-proof and non-conducting qualities, rendering asbestos papers a valuable protection against fire

Rolls are 36 inches wide, weighing from 50 to 75 pounds.

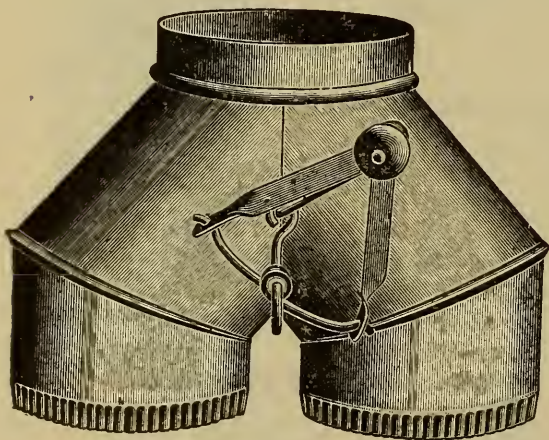
Price, per pound.....\$ .10

## The "Perfection" Rain Water Cut-Off.

The Cheapest and Best Cut-Off Ever Introduced. Recommended by Architects, Builders and Users Everywhere.

**AUTOMATIC, DURABLE, SIMPLE and CHEAP.**

The Only Absolute Self-Locking, Automatic Cut-Off on the Market.



Packed in crates of one dozen each.

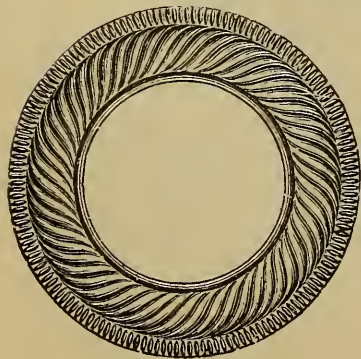
Tin---Nicely Japanned.

2 inch, per dozen.....	\$3.00
2½ inch, per dozen.....	3.00
2¾ inch, per dozen.....	3.60
3 inch, per dozen.....	3.60
3½ inch, per dozen.....	4.80
4 inch, per dozen.....	5.40
5 inch, per dozen.....	9.00
6 inch, per dozen.....	12.00

Galvanized.

2 inch, per dozen .....	\$ 4.20
3 inch, per dozen .....	4.80
4 inch, per dozen .....	7.20
5 inch, per dozen .....	12.00
6 inch, per dozen .....	14.00

Discount.....per cent.



## Royal Stove-Pipe Collars.

Patented July 19, 1887, and April 9, 1889.

Sizes.....	4	4½	5	5½	6	7	8
Outside Measure..	7¾	7¾	8¼	8¾	9½	10¾	12¾
Price, per dozen..	\$ .20	\$ .25	\$ .30	\$ .35	\$ .40	\$ .50	\$ .75



U. S. Standard Gauge.  
SHEET IRON AND STEEL

Table showing gauges and comparative weights between Galvanized and Black Sheet Iron and Steel.

GAUGES .....	10	11	12	13	14	15	16
GALVANIZED—Weight per sq. ft. in oz.	92.5	82.5	72.5	62.5	52.5	47.5	42.5
BLACK—Weight per sq. ft. in oz.	90	80	70	60	50	45	40

GAUGES .....	17	18	19	20	21	22	23
GALVANIZED—Weight per sq. ft. in oz.	38.5	34.5	30.5	26.5	24.5	22.5	20.5
BLACK—Weight per sq. ft. in oz.	36	32	28	24	22	20	18

GAUGES .....	24	25	26	27	28	29	30
GALVANIZED—Weight per sq. ft. in oz.	18.5	16.5	14.5	13.5	12.5	11.5	10.5
BLACK—Weight per sq. ft. in oz.	16	14	12	11	10	9	8

Table showing net prices per sq. foot, Galvanized Sheets.

Gauge No.	Disc't	67½	67½ & 5	67½ 10	70	70 & 5	70 & 10	72½	72½ & 5	72½ & 10	75	75 & 5	75 & 10	77½	77½ & 5	77½ & 10	80
10-16	Pr. 100	3.90	3.705	3.51	3.60	3.42	3.24	3.30	3.135	2.97	3.00	2.85	2.70	2.70	2.56	2.43	2.40
18-21	Pr. 100	4.225	4.014	3.802	3.90	3.70	3.51	3.575	3.396	3.217	3.25	3.08	2.92	2.92	2.78	2.63	2.60
22-24	Pr. 100	4.55	4.322	4.095	4.20	3.99	3.78	3.85	3.657	3.465	3.50	3.32	3.15	3.15	2.99	2.83	2.80
25-26	Pr. 100	4.875	4.631	4.387	4.50	4.27	4.05	4.125	3.919	3.712	3.75	3.56	3.37	3.37	3.20	3.03	3.00
27	Pr. 100	5.20	4.94	4.68	4.80	4.56	4.32	4.40	4.18	3.96	4.00	3.80	3.60	3.60	3.42	3.24	3.20
28	Pr. 100	5.525	5.249	4.972	5.10	4.84	4.59	4.675	4.441	4.207	4.25	4.03	3.82	3.82	3.63	3.44	3.40

Galvanized Sheets, 96" long.

Number of Sheets Generally Placed in Bundles.

	24 in.	26 in.	28 in.	30 in.	36 in.
No. 18—	4	4	4	4	3
“ 20—	6	5	5	5	4
“ 22—	7	6	6	5	5
“ 24—	8	8	7	7	6
“ 25—	9	8	8	7	6
“ 26—	10	10	9	8	7
“ 27—	11	10	10	9	8
“ 28—	12	11	10	10	8

Table of sizes carried in stock, and number of square feet to one sheet of each size.

SIZE	20 x 96	24 x 96	26 x 96	28 x 96	30 x 96	36 x 96
SQUARE FT.	13⅓	16	17⅓	18⅔	20	24



# Russia and Planished Sheet Iron.

## PLANISHED SHEET IRON.

"WOOD'S PATENT."

"A" Numbers 24, 25, 26, Size, 28 in., wide, 56 in., 60 in., 72 in., and 84 in., long.

"A" " " 27, 28, " 28 " " 56 " 60 " " 72 " "

"A" Numbers 24, 25, 26, 27, and 28, Size, 28 in., wide, about 60 in., long.

—0000—

Locomotive Jacket Planished, Nos. 20 to 23 inclusive, 28 in., or 30 in., wide, 45 in., 48 in., 56 in., 60 in., 72 in., and 84 in., long.

—0000—

Net price per pound, full packs . . . . . "A" . . . . . Cts.

" " " " " " " " " " "B" . . . . .

"LOCOMOTIVE JACKET," special price on application.

WIRE GAUGE.	STANDARD SIZE.	APPROXIMATE WEIGHT PER SHEET.	APPROXIMATE RUSSIA GAUGE.
No. 22 .....	28 x 60 in.	13½ lbs.	No. 14
" 23 .....	"	12½ "	" 13
" 24 .....	"	11½ "	" 12
" 25 .....	"	10½ "	" 11
" 26 .....	"	9½ "	" 10
" 27 .....	"	8½ "	" 9
" 28 .....	"	7¾ "	" 8

Average net weight per bundle, about 250 pounds.

## GENUINE RUSSIA IRON.

Size,—28 x 56

Numbers 7 and 8, per pound,	Full Bundle.....	cents
Numbers 9 and 10, per pound,	" " .....	"
Numbers 11, 12 and 13, per pound,	" " .....	"
Numbers 14, 15 and 16, per pound,	" " .....	"

NUMBERS.	SIZE.	APPROXIMATE WEIGHT PER SHEET.	APPROXIMATE WIRE GAUGE.
No. 7 .....	28 x 56 in.	6¼ lbs.	No. 29
" 8 .....	"	7¼ "	" 28
" 9 .....	"	8 "	" 27
" 10 .....	"	9 "	" 26
" 11 .....	"	10 "	" 25
" 12 .....	"	10¾ "	" 24½
" 13 .....	"	11¾ "	" 24
" 14 .....	"	12½ "	" 23¼
" 15 .....	"	13½ "	" 22¾
" 16 .....	"	14¾ "	" 21½

Average gross weight per bundle, about 245 lbs.

Tare allowance, 25 lbs.

## LIST OF PATENT PLANISHED SHEETS PER PACK.

No. 23 x 28 x 84 inch .....	14 Sheets	No. 25 x 28 x 60 inch .....	24 Sheets
" 23 x 28 x 72 " .....	16 "	" 26 x 28 x 60 " .....	26 "
" 23 x 28 x 60 " .....	19 "	" 27 x 28 x 60 " .....	27 "
" 23 x 28 x 56 " .....	20 "	" 28 x 28 x 60 " .....	33 "
" 24 x 28 x 60 " .....	22 "		

# Planished Sheet Steel

## Lustre Sheet Steel

NOS. 22 TO 28 INCLUSIVE

*Size of Sheets, 28x60 inches, and packed in cases of  
about 250 pounds each.*

---

Planished, all Numbers . . . . .	\$.....	per lb.
Lustre,       “       “ . . . . .	.....	“

---

Planished Steel is a sheet of mild low-carbon pliable steel, with a polished surface and other desirable essentials of the **Genuine Russia Sheet Iron**, tenacity of scale and ability to retain its color, under long-wearing heats, and to withstand corrosion in moist and saline atmosphere as well as the imported.

Planished Steel is so free from stiffness or springiness that for round work the forming rolls may be run very loosely. If screwed down as tightly as ordinarily for working iron, there is liability of crimping the work slightly.

---

### Common Refined Black Sheets.

Gauge Numbers,	10	12	14	16	18	20	22	24	26	27	28
Price per pound, net,	—	—	—	—	—	—	—	—	—	—	— cts.

---

### Merchant's Cleaned Black Sheets,

Fine Quality.   Uniform Color.   Inexpensive, but first-class.

### Single Pass Cold Rolled Soft Cleaned Black Steel,

Double Seaming Quality.

ALL SIZES AND GAUGES.


WRITE FOR PRICES.

---

### W. D. Woods Refined Black Iron,

Prices Low, Quality Good.

# “SPENCER” POLISHED STEEL SHEETS.

  
A HIGH-GRADE  
MATERIAL AT  
CONSIDERABLY  
LESS THAN THE  
PRICE FOR  
PLANISHED SHEETS

*In Bundles of about 150 lbs. each.*

*Packed in Cases of about 300 lbs. each, 4-10 c. lb. extra.*

Gauges, No.	22	24	25	26	27	28
Price per lb., \$	\$.....	\$.....	\$.....	\$.....	\$.....	\$.....

Standard sizes— { 24x60", 24x84", 24x101"  
                                  { 28x60", 28x84", 28x101"

All orders for other than Standard Sizes must be for not less than 5 tons of each size.

## WE CAN SUPPLY

*Harvey's Patent Cleaned Black Iron  
Bath Boiler and Gas Holder Iron  
Dasher Steel  
Swede and Norway Sheets Blue Annealed  
A. W. Cleaned and Water Pipe Sheets  
Pickled Cold Rolled and Annealed Sheets  
Black Plate—Cold Rolled Pickled and  
Annealed for Tinning and other Purposes*

WRITE FOR SPECIAL PRICES.

### EXTREME SIZES OF FLAT IRON AND STEEL SHEETS.

Nos. 10 and 11—U. S. Gauge	.....60x141 in.	.....66x72 in.
" 12	.....60x120 "	
" 13 and 14	.....42x144 "	.....48x120 " .....54x108 in.
" 15	.....42x144 "	.....48x96 "
" 16 to 18	.....42x144 "	.....43x96 "
" 19 to 22	.....42x144 "	
" 23 and 24	.....42x120 "	
" 25 and 26	.....32x144 "	.....40x120 "
" 27	.....36x120 "	.....48x96 "
" 28	.....34x120 "	.....40x96 "
" 29	.....28x108 "	.....34x96 " .....36x84 in.
" 30	.....28x108 "	.....30x96 " .....36x84 "



# U. S. POLISHED SHEET STEEL

.... FOR.....

STOVE PIPES.                      STOVE DRUMS.  
and all fine Sheet Iron Work.

## STANDARD SIZES AND GAUGES OF U. S. POLISHED SHEET STEEL.

U. S. Gauge Nos. 18, 20, 22, 24, 26, 27, 28. Widths, 24'' and 28''. Lengths, 60'', and 101''.

Put up in bundles of about 150 lbs. each and in sheet iron cases of about 300 lbs. each, net.

No charge for cases.

No shipment less than 900 lbs.

We deliver f. o. b. cars at Demmler, Pa. Freights from Demmler are the same as from Pittsburgh.

The consignee becomes the owner of the steel when we have loaded it on the cars. To secure the lowest freight rates we ship at owner's risk unless ordered by the buyer to contract at a higher rate of freight under which the Railroad Company will assume all risk in transportation

All orders for other than standard sizes must be for not less than 5000 lbs. of each size and gauge.

## Sheet Iron=Sap Pan Sizes.

### COMMON BLACK.

GAUGE	SIZE
18	40' x 96'' or 120''
18	44    "    "
18	48    "    "
20	40    "    "
20	44    "    "
20	48    "    "

### JUNIATA BLACK.

GAUGE	SIZE
22	40'' x 96'' or 120''
22	44    "    "
22	48    "    "
24	40    "    "
24	44    "    "
24	48    "    "

### GALVANIZED.

~ MARKET PRICES. ~

NO  
WASTE

❧

NO  
TRIMMING

MERCHANTS  
BRAND

STOVE PIPE SHEETS

POLISHED

ALL EVEN COLOR

CHEAP, CLEAN, CONVENIENT

MANU'D FOR AND SOLD BY

MERCHANT & CO., INC.  
PHILADELPHIA

EVERY SHEET PERFECT

5 DOZEN SHEETS  
NO 27 x 24 x 20 1/8 = 158 #

OTHER SIZES MADE TO ORDER  
TAPERED IF REQUIRED.

TIME  
LABOR  
AND  
MONEY  
SAVED

STOCK SIZES.

Will Make Pipe.	Size of Sheets.	Number of Sheets per box.	Gauges and Approximate Weight per box.		
			No. 26	No. 27	No. 28
7 in.,	24x23	60 sheets	172 lb	158 lb	144 lb
6 1/2 in.,	24x21 1/2	60 "	161	148	134
6 in.,	24x20 1/8	60 "	150	138	125
5 1/2 in.,	24x18 3/8	72 "	165	152	138
5 in.,	24x17	72 "	153	140	127
4 1/2 in.,	24x15 1/8	72 "	135	124	113
4 in.,	24x13 1/2	72 "	122	111	101
3 1/2 in.,	24x12	72 "	108	99	90
3 in.,	24x10 1/4	72 "	92	85	77

Nos.	20,	22,	24,	26,	27,	28
Price.	\$ .....	.....	.....	.....	.....	.....

Extreme size, 26x48.  
Odd sizes, less than 26x48, cut to order without extra charge.  
Tapered sheets, advance 25 cts. per 100 lbs.

Merchant's Stove-Pipe Elbows

SUPERIOR TO ANY IN THE MARKET

3 in. 3 1/2 in. 4 in. 4 1/2 in. 5 in. 5 1/2 in. 6 in. 6 1/2 in. 7 in.

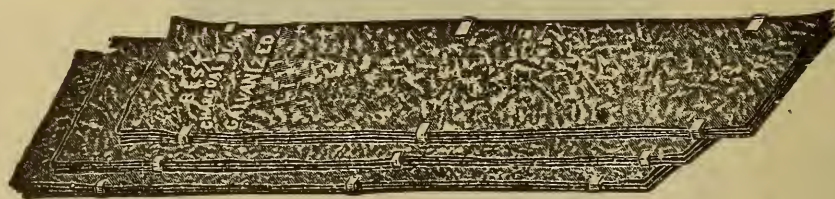
BLACK, Price per doz.,	.....
BLUE-ANNEALED, "	.....
POLISHED, "	.....

# MERCHANT'S



## Genuine Charcoal . . . . .

## Bloom Galvanized Iron, (not Steel)



### Genuine Charcoal Bloom Black Iron Sheets



For certain classes of work where Galvanized sheets are subjected to a continuous high temperature, we recommend the use of Genuine Charcoal Bloom Iron.

We can promptly furnish Genuine Charcoal Bloom Iron, (not steel) either Black or Galvanized, in all the regular sizes and guages, and make special sizes to order.

---

*We Solicit Inquiries or Orders.*



## Pressed Corrugated Sheets.

For Roofing, Siding, Ceiling, Doors, Shutters, Awnings,  
Grain Elevators, Mills and Factories, Etc.

**Black, Painted and Galvanized.**

Corrugated Sheeting is the strongest known form of sheet metal, and imparts material strength to the structure to which it is attached, by its lineal rigidity.

Good wooden shingles are a thing of the past, and they afford no protection whatever in case of fire. Slate Roofing requires a costly structure to support its heavy weight. Heat, freezing, or settling of the building will cause slate to break, and repairs are attended with much difficulty and expense, while *Metal Covering* permits the use of light frame work, thus cheapening the cost of structures without lessening their utility, and should repairs become necessary, they are easily made.

It has the following qualities, essential to all covering material: It is fire, water and wind proof; it is lightning proof; it is cheap, light and durable; it allows for the use of a light frame, being a support in itself. A building covered with it makes a handsome appearance.

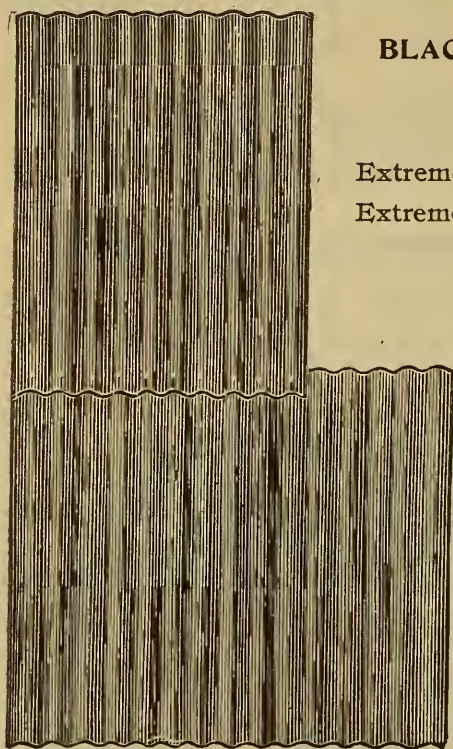
It is only necessary to suggest the advantage of using this material for protection against fire. Insurance companies demonstrated its value by their ratings.

We make estimates, when desired, on spaces to be covered. In such cases we must have detailed dimensions.

Approximate weight per square of Corrugated Sheets, adopted by  
Association of Iron and Steel Roofers.

GAUGES . . . . .	28	27	26	24	22	20	18	16
GALVANIZED . .	86	93	99	127	154	182	236	291
PAINTED . . . . .	69	77	84	111	138	165	220	275

# CORRUGATED STEEL OR IRON.



**BLACK, PAINTED AND GALVANIZED.**

Standard  $2\frac{1}{2}$  inch Corrugations.

Extreme length, Nos. 18 to 28.....120 in.

Extreme length, No. 16..... 96 in.

## REGULAR LENGTHS.

Galvanized .....5  $5\frac{1}{2}$  6  $6\frac{1}{2}$  7 8 9 and 10 ft.

Black and Painted.....5 6 7 8 9 and 10 "

Extreme width .....27 $\frac{1}{2}$  in.

Covering width ..... 25 "

We can supply all the usual Corrugations. Eight feet lengths are furnished, unless otherwise specified.

In quoting prices we make no allowance for laps.



SHOWING WHERE TO NAIL LAP.

The usual custom is to nail through the top of the Corrugations, but this frequently indents the sheets; we recommend nailing in the manner shown above.

## DISTANCES BETWEEN ROOF SUPPORTS.

No. 16 Gauge, purlins can be 7 to 9 feet apart; No. 18, 6 to 7 feet apart; Nos. 20 and 22, 4 to 5 feet apart; No. 24, 2 to 4 feet apart; lighter gauges 1 to 2 feet apart.

Sheathing may be dispensed with when Nos. 16 to 22, or even 24, is used.

An end lap of one inch and one corrugation side lap, is sufficient when Corrugated Iron is used for Siding, and cross supports may be placed a little farther apart.

When Corrugated Iron is used for Roofing, the most satisfactory results are obtained if sides are lapped two corrugations, and end laps not less than three to six inches.

## CURVED CORRUGATED SHEETS.

For Roofs, Ceilings, Iron Bridge Work, Wharf Boat Roofs, Ventilator Roofs, Dormer Windows, Arches, Awnings, etc.

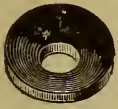
*We can also furnish Corrugated Elevator Siding Plates.*

# LEAD WASHERS

Used when putting on ROOFING and SIDING  
Corrugated or V=crimped as shown  
in the cut below, will

## PREVENT LEAKS

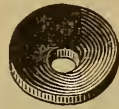
Full Size.



No. 8.  
( $\frac{5}{32}$  in. hole.)



Full Size.



No. 12.  
( $\frac{3}{32}$  in. hole.)

No Corrugated or V=crimped Roofing ought to be laid without using these washers.

They make an **absolutely water-tight joint** on any surface, whether concave, convex or flat; they also **prevent rust** below the nail head, and the head from cutting into the sheet, thus making a more durable job.

Put up in boxes containing 100 pounds each.

One pound contains 325 Washers.

One pound will put on 2 to 3 squares.

Hole in the No. 8 Washer is  $\frac{5}{32}$  of an inch in diameter.

Hole in the No. 12 Washer is  $\frac{3}{32}$  of an inch in diameter.

Price per pound . . . . . 25 cts., net.

## NAILS

Owing to the frequent change in the *Base Price* of nails it is impossible to issue a *printed* price list

Plain, Tinned and Galvanized Barbed Wire Roofing Nails.

Galvanized and Tinned Wire Slating Nails. Galvanized and Tinned Cut Slating Nails.

Copper Slating Nails, large heads. Yellow Metal Slating Nails, large heads.

Yellow Metal Sheathing Nails. Yellow Metal Stem Nails, Lead Nails, (any length to 5 ins.)

Galvanized Cut Sheathing Nails. Galvanized Boat Rivets and Washers. Galvanized

Chisel Point Boat Nails. Galvanized Anchor Nails. Galvanized Bellows

Nails. Galvanized Cut Nails. Galvanized Wire Nails. Galvanized Cut

Spikes. Galvanized Wire Spikes. Galvanized Deck Spikes. Galvanized

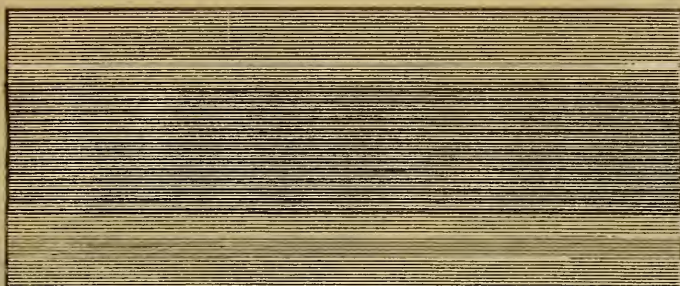
Boat Nails. Zinc Slating Nails. Zinc Sheathing Nails.

LOWEST MARKET PRICES.





# Corrugated and Crimped Sheets.



CORRUGATED IN CENTRE WITH BLANK SPACE ON TWO SIDES.

We corrugate Copper and other Sheet Metals for covering drain boards in hotels and private houses, using corrugations one-half inch from center to center.

This corrugation takes up one inch of material to the foot.

Sheets longer than five feet cannot be corrugated the long way of sheet.

Always state, when ordering, whether corrugations are to run long or short way of sheet

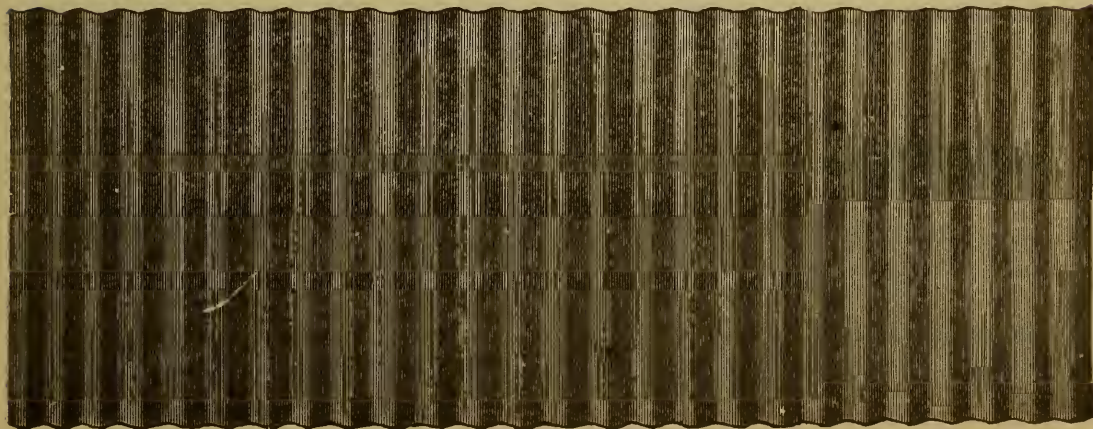
Corrugating one sheet .....	50 cents
The same when blank space is left on one side of sheet .....	60 "
The same when blank space is left on two sides of Sheet .....	85 "



ENTIRE SHEET CORRUGATED

## NOTICE TO CORNICE MANUFACTURERS.

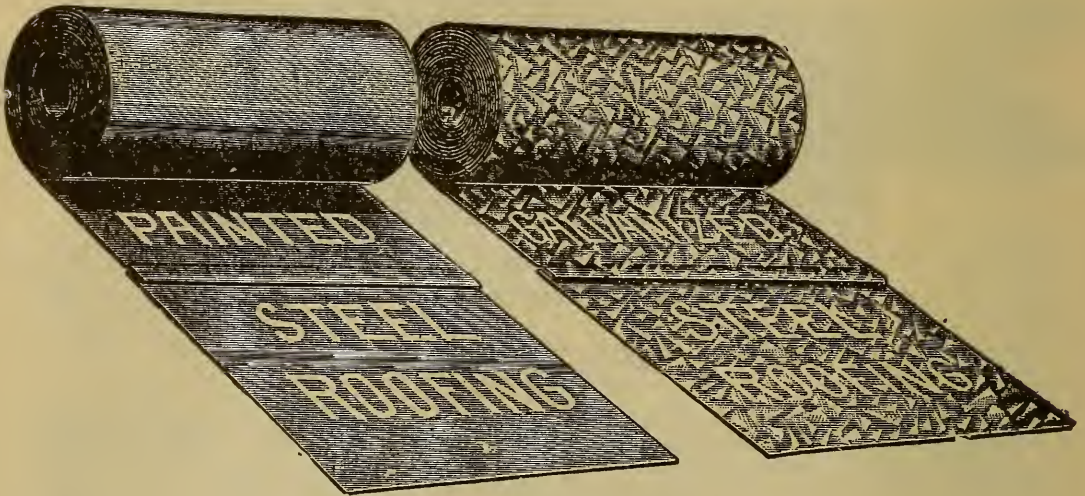
We can furnish 3-16 inch CRIMPED SHEETS of gauges 24 and lighter, 36 inches wide, and narrower in lengths, 96 inches.



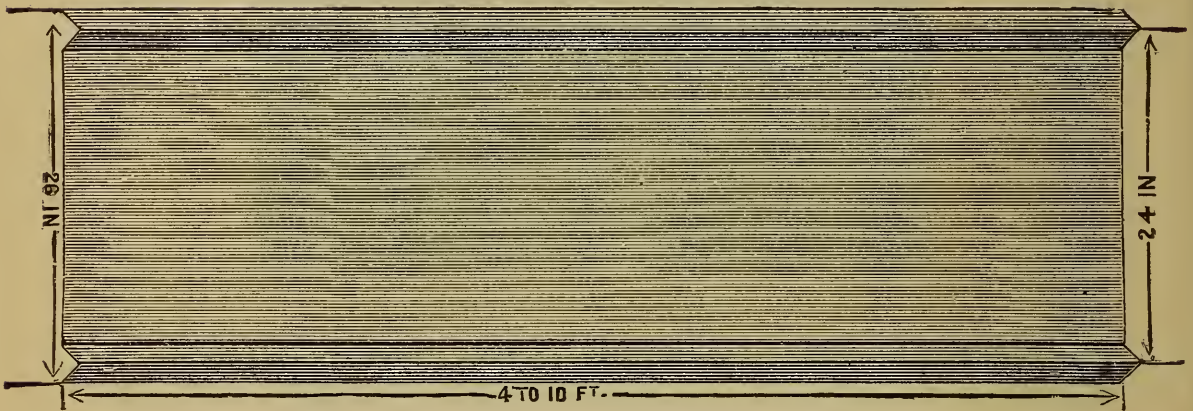


# Self-Capping Steel Roofing.

**With Double-Locked Cross Seams.**



## V-Crimp Roofing.



Shows our V-Crimp Roofing which can be laid on any roof having a pitch of 2 inches or more to the foot. Especially apated for covering Factories, Barns, and Farm Out-houses; very simple in construction and easily laid.

Sheets kept in stock 5, 6, 7, 8, 9 and 10 foot lengths.

**SPECIAL PRICES ON APPLICATION.**



# SOLDERING COPPERS.

### Regular Tinnens Pointed Pattern.

**Clinched, also Riveted Handles.**

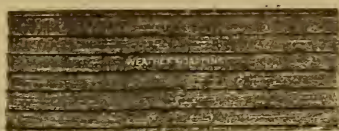
Price, 2 to 10 lbs. per pair,	Clinched Handles . . . . .	\$	per lb.
" " " " "	Riveted " . . . . .	"	"

**Always state whether weight wanted is per pair or each and if clinched or riveted handles.**



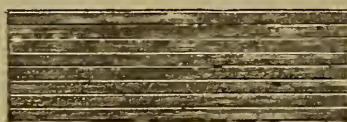
# METAL SIDING.

WEATHER BOARD SIDING.



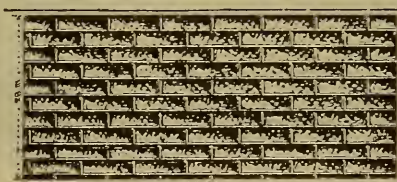
Painted and Galvanized. In 5, 6, 7, 8, 9, 10 Feet Lengths.

**BEADED IRON SIDING.**



Painted. In 5, 6, 7, 8, 9, 10 Feet Lengths.

**ROCK FACE BRICK SIDING.**



Painted and Galvanized.

**STEEL PRESSED BRICK**—Similar in appearance to Philadelphia Pressed Brick.

PAINTED AND GALVANIZED.

---

## RULES OF MEASUREMENT.

In selling SHEET METAL ROOFING and SIDING, on which all quotations are based.

### A SQUARE.

Consists of 100 square feet, calculated by the following rules.

### CORRUGATED SHEETS.

Full length and full width from edge to edge, after being corrugated is calculated.

### V-CRIMPED, STANDING SEAM, AND WEATHER BOARD.

Full length of sheets and actual covering width is calculated.

### ROLL ROOFING.

The actual covering width, (allowing 2½ inches for seaming) and the full length of rolls after locking, is calculated

---

## NAILS, WOOD STRIPS AND PAINT

Are sold by the pound, lineal foot, gallon or at a fixed extra price per square of roofing, and are not included in the price quoted in the sheet iron or steel but are charged as separate items when furnished.

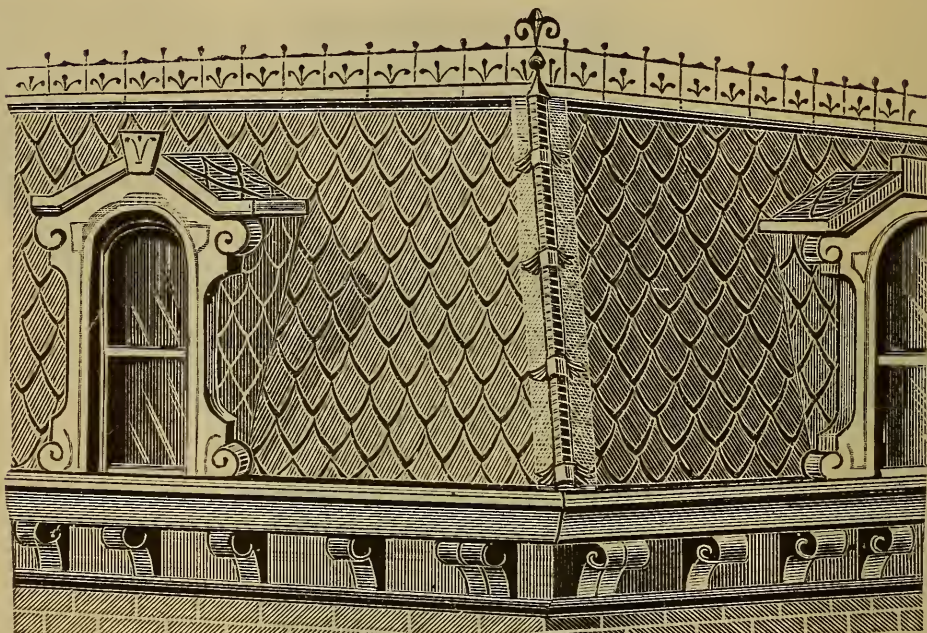
## RIDGE CAP, CORRUGATED WOOD STRIPS AND CORNER BOARDS

Are sold by the lineal foot, and charged as separate items when furnished, and are not included in prices quoted on sheets or roofing.



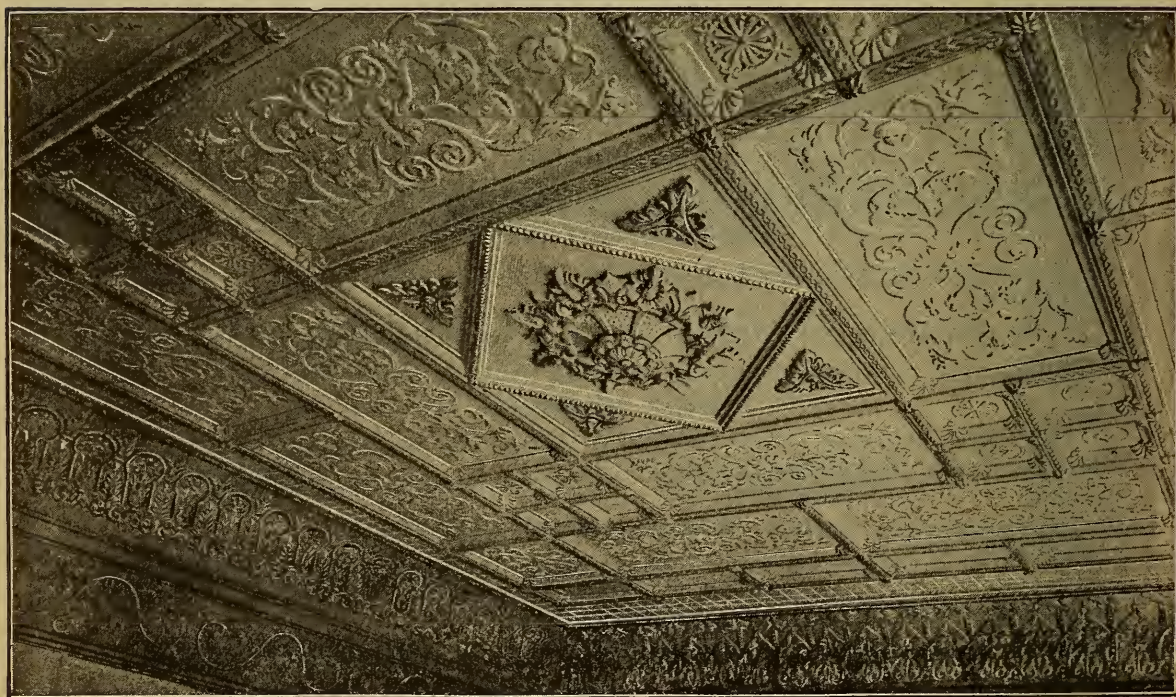
# **. . METAL SHINGLES . .**

FOR ROOFING AND SIDING.



*Above Mansard covered with Gothic Tiles.*

## **Stamped Metal Ceiling Plates.**



*Saependorph's Patent Sectional Metal Ceiling and Side Wall Finish.*



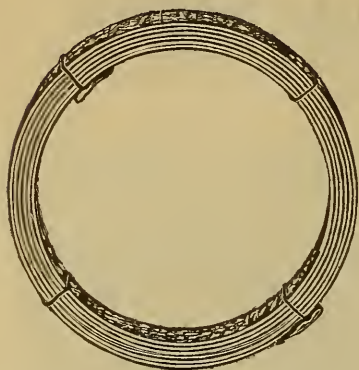
## WEIGHT OF PLAIN BLACK SHEETS,

as determined by the Standard United States Gauge.

No. of Gauge	Approximate Thick- ness in fractions of an inch.	Approximate Thick- ness in decimal parts of an inch.	Weight per square foot in ounces avoirdupois.	Weight per square foot in pounds avoirdupois.
0000000	1-2	.5	320	20.00
000000	15-32	.46875	300	18.75
00000	7-16	.4375	280	17.50
0000	13-32	.40625	260	16.25
000	3-8	.375	240	15.
00	11-32	.34375	220	13.75
0	5-16	.3125	200	12.50
1	9-32	.28125	180	11.25
2	17-64	.265625	170	10.625
3	1-4	.25	160	10.
4	15-64	.234375	150	9.375
5	7-32	.21875	140	8.75
6	13-64	.203125	130	8.125
7	3-16	.1875	120	7.5
8	11-64	.171875	110	6.875
9	5-32	.15625	100	6.25
10	9-64	.140625	90	5.625
11	1-8	.125	80	5.
12	7-64	.109375	70	4.375
13	3-32	.09375	60	3.75
14	5-64	.078125	50	3.125
15	9-128	.0703125	45	2.8125
16	1-16	.0625	40	2.5
17	9-160	.05625	36	2.25
18	1-20	.05	32	2.
19	7-160	.04375	28	1.75
20	3-80	.0375	24	1.50
21	11-320	.034375	22	1.375
22	1-32	.03125	20	1.25
23	9-320	.028125	18	1.125
24	1-40	.025	16	1.
25	7-320	.021875	14	.875
26	3-160	.01875	12	.75
27	11-640	.0171875	11	.6875
28	1-64	.015625	10	.625
29	9-640	.0140625	9	.5625
30	1-80	.0125	8	.5
31	7-640	.0109375	7	.4375
32	13-1280	.01015625	6½	.40625
33	3-320	.009375	6	.375
34	11-1280	.00859375	5½	.34375
35	5-640	.0078125	5	.3125
36	9-1280	.00703125	4½	.28125
37	17-2560	.00640625	4¼	.265625
38	1-160	.00625	4	.25

NOTE.—For the purpose of securing uniformity of gauge throughout the United States, Congress, under date March 3d, 1893, adopted the above as the Legal Standard for determining the thickness of uncoated iron and steel sheets, allowing a variation of 2½ per cent. either above or below for practical use and application.





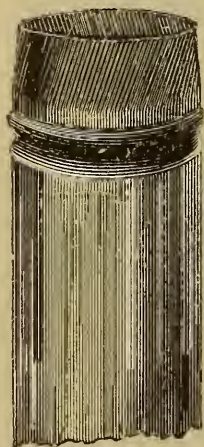
## GALVANIZED AND BLACK HOOP IRON.

NOT THINNER THAN No. 20 GAUGE.

ALL SIZES.

$\frac{1}{2}$ ,  $\frac{5}{8}$ ,  $\frac{3}{4}$ ,  $\frac{7}{8}$ , 1,  $1\frac{1}{8}$ ,  $1\frac{1}{4}$ ,  $1\frac{1}{2}$ ,  $1\frac{5}{8}$ ,  $1\frac{3}{4}$ , & 2 in.

Lowest Market Prices.



## IX BRIGHT HEATER PIPE.

PRICE PER FOOT.

Round.		Square.
6 inch, 06 cts. ft. ....	$3\frac{1}{2}$ x	6 inch, 08 cts. ft.
7 inch, 07 cts. ft. ....	$2\frac{3}{4}$ x	9 inch, 11 cts. ft.
8 inch, 08 cts. ft. ....	4 x	8 inch, 11 cts. ft.
$8\frac{1}{2}$ inch, 08 cts. ft. ....	$3\frac{1}{2}$ x	10 inch, 11 cts. ft.
9 inch, 10 cts. ft. ....	4 x	12 inch, 13 cts. ft.
10 inch, 11 cts. ft. ....	5 x	10 inch, 13 cts. ft.
12 inch, 14 cts. ft. ....	8 x	10 inch, 17 cts. ft.
15 inch, 17 cts. ft. ....	6 x	12 inch, 17 cts. ft.
	8 x	14 inch, 18 cts. ft.

Discount, .....



## METALLIC BOILER BOTTOMS.

ALL SIZES.

Pitts, net, per pound .....	cts.
Flats, " " " .....	cts.



## ENAMELED PAIL WOODS.

Inches.....	3	$3\frac{1}{2}$	4
Per gross, ...	\$ 70	70	1 00
Discount.....			

## PLAIN PAIL WOODS.

3 inch. per box 500, .....	\$ 90
$3\frac{1}{2}$ " " " .....	90
4 " " " .....	1 50
Discount .....	

## STANDARD PRICE LIST OF SELECTED MICA, 1898.

Taking Effect January 1st 1898, Subject to Change Without Notice.

Size	Price per lb.	Size	Price per lb.	Size	Price per lb.	Size	Price per lb.	Size	Price per lb.	Size	Price per lb.
1½ x 3	\$.85	2 x 5	\$2.00	2½ x 4	\$2.00	3 x 4¼	\$5.25	3½ x 6½	\$8.75	4½ x 8	\$10.00
1½ x 3¼	.90	2 x 5½	2.65	2½ x 4¼	2.25	3 x 4½	6.00	3½ x 7	9.00	4½ x 9	10.25
1½ x 3½	.95	2 x 6	3.25	2½ x 4½	2.75	3 x 4¾	6.50	3½ x 8	9.25	5 x 5	8.50
1½ x 3¾	1.00	2 x 6½	3.75	2½ x 4¾	3.25	3 x 5	7.00	3½ x 9	9.50	5 x 5½	9.00
1½ x 4	1.15	2 x 7	4.75	2½ x 5	3.75	3 x 5½	7.50	3¾ x 3¾	5.50	5 x 6	9.50
1½ x 4¼	1.25	2 x 7½	5.00	2½ x 5¼	3.85	3 x 6	8.00	3¾ x 4	6.00	5 x 6½	9.75
1½ x 4½	1.40	2 x 8	5.25	2½ x 5½	4.00	3 x 6½	8.25	3¾ x 4¼	6.25	5 x 7	10.00
1½ x 4¾	1.50	2¼ x 2¼	.85	2½ x 6	5.25	3 x 7	8.50	3¼ x 4½	6.75	5 x 8	10.25
1½ x 5	1.75	2¼ x 2½	.90	2½ x 6½	5.50	3 x 8	8.75	3¾ x 4¾	7.00	5 x 9	10.50
1½ x 5½	2.15	2¼ x 2¾	.95	2½ x 7	6.25	3 x 9	9.00	4 x 4	7.00	5 x 10	11.00
1½ x 6	2.65	2¼ x 3	1.25	2½ x 8	6.75	3¼ x 3¼	3.50	4 x 4¼	7.00	5½ x 5½	9.25
1¾ x 3	.95	2¼ x 3¼	1.40	2¾ x 2¾	1.50	3¼ x 3½	4.00	4 x 4½	7.25	5½ x 6	9.75
1¾ x 3¼	1.00	2¼ x 3½	1.55	2¾ x 3	2.00	3¼ x 3¾	4.50	4 x 4¾	7.50	5½ x 7	10.25
1¾ x 3½	1.10	2¼ x 3¾	1.70	2¾ x 3¼	2.25	3¼ x 4	5.25	4 x 5	7.75	5½ x 8	10.50
1¾ x 3¾	1.25	2¼ x 4	1.85	2¾ x 3½	2.50	3¼ x 4¼	5.50	4 x 5¼	8.00	5½ x 9	10.75
1¾ x 4	1.35	2¼ x 4¼	2.00	2¾ x 3¾	2.75	3¼ x 4½	6.00	4 x 5½	8.50	6 x 6	10.00
1¾ x 4¼	1.40	2¼ x 4½	2.25	2¾ x 4	3.25	3¼ x 4¾	6.50	4 x 6	9.00	6 x 6½	10.25
1¾ x 4½	1.50	2¼ x 4¾	2.50	2¾ x 4¼	3.50	3¼ x 5	7.25	4 x 6½	9.25	6 x 7	10.50
1¾ x 4¾	1.65	2¼ x 5	3.00	2¾ x 4½	4.00	3¼ x 5¼	7.50	4 x 7	9.50	6 x 8	10.75
2 x 2	.85	2¼ x 5¼	3.10	2¾ x 4¾	4.50	3¼ x 5½	7.75	4 x 8	9.75	6 x 9	11.00
2 x 2¼	.85	2¼ x 5½	3.25	2¾ x 5	5.25	3¼ x 5¾	8.00	4 x 9	10.00	6 x 10	11.50
2 x 2½	.90	2¼ x 6	4.50	2¾ x 5¼	5.50	3¼ x 6	8.50	4¼ x 4¼	7.00	7 x 7	10.75
2 x 2¾	.95	2¼ x 6¼	4.75	2¾ x 5½	5.75	3½ x 3½	4.50	4¼ x 4½	7.50	7 x 8	11.00
2 x 3	1.00	2¼ x 6½	5.25	2¾ x 6	6.25	3½ x 3¾	5.00	4¼ x 4¾	7.75	7 x 9	11.25
2 x 3¼	1.05	2¼ x 7	6.00	2¾ x 6½	6.50	3½ x 4	6.00	4¼ x 5	8.00	7 x 10	12.00
2 x 3½	1.15	2½ x 2½	1.10	2¾ x 7	7.00	3½ x 4¼	6.25	4½ x 4½	7.50	8 x 8	12.00
2 x 3¾	1.25	2½ x 2¾	1.25	3 x 3	2.75	3½ x 4½	6.50	4½ x 5	8.25	8 x 9	12.50
2 x 4	1.45	2½ x 3	1.50	3 x 3¼	3.00	3½ x 4¾	7.00	4½ x 5½	8.75	8 x 10	13.00
2 x 4¼	1.50	2½ x 3¼	1.60	3 x 3½	3.50	3½ x 5	7.50	4½ x 6	9.25	All Larger at Special Prices.	
2 x 4½	1.65	2½ x 3½	1.75	3 x 3¾	4.00	3½ x 5½	8.25	4½ x 6½	9.50		
2 x 4¾	1.75	2½ x 3¾	1.85	3 x 4	5.00	3½ x 6	8.75	4½ x 7	9.75		

## DISCOUNTS:

Selected North Carolina Mica, . . . per cent.

Selected Wyoming Mica . . . per cent.

&gt;&gt;&gt;&gt;&gt;&gt;†&lt;&lt;&lt;&lt;&lt;&lt;&lt;

“North Carolina” is a selected clear and lustrous mica of highest grade fully guaranteed. “Wyoming is not perfectly clear, but in all other respects is equal

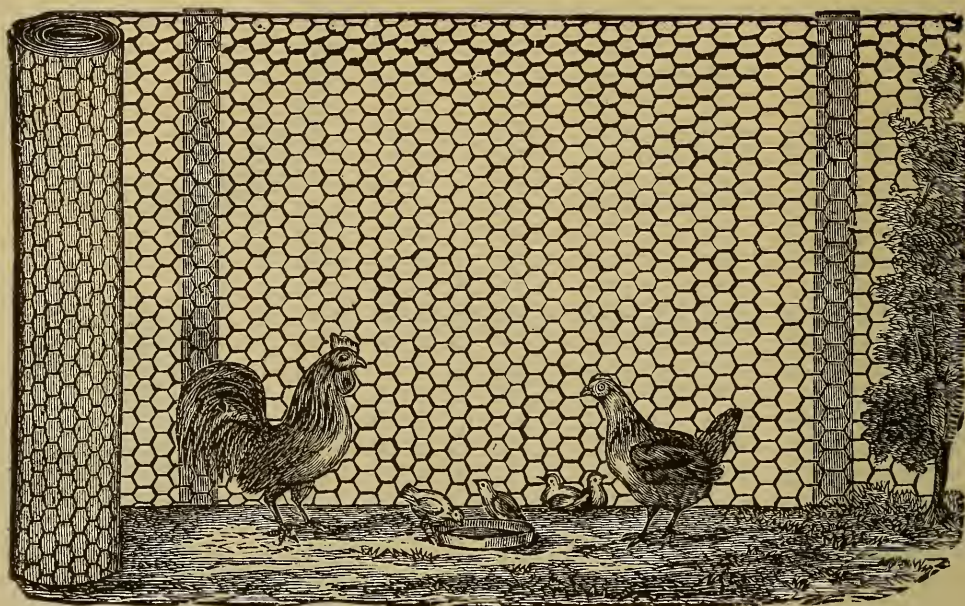
“North Carolina.”

Write for our Special Prices on Assorted Packages, put up Expressly for the Retail Trade, in one, two, and three Pound Packages.

All Mica delivered to any part of the United States free of charge.



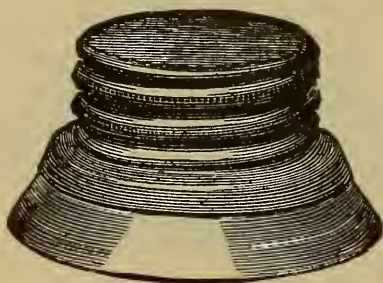
# GALVANIZED STEEL WIRE NETTING.



Cut of 2-inch No. 19 Netting, for Poultry Yard.

Price, 2½ cts. per square foot.

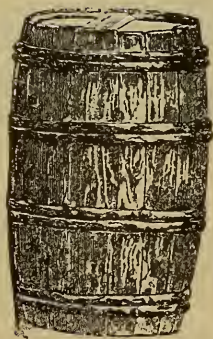
DISCOUNT . . . . . per cent.



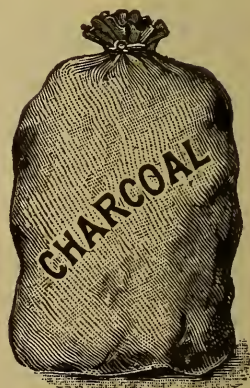
## CAN SCREWS

	ZINC.	TIN.
½ inch, per gross . . . . .	\$ 4 00	. . . . .
¾ inch, per gross . . . . .	4 50	. . . . .
1 inch, per gross . . . . .	6 00	. . . . .
1¼ inch, per gross . . . . .	8 00	. . . . .
1½ inch, per gross . . . . .	12 00	. . . . .
2 inch, per gross . . . . .	20 00	. . . . .

DISCOUNT . . . . . per cent.



## ROSIN AND CHARCOAL



Price according to quantity.

Price, per bag, 2½ bus., 65 cts.



Agents for the

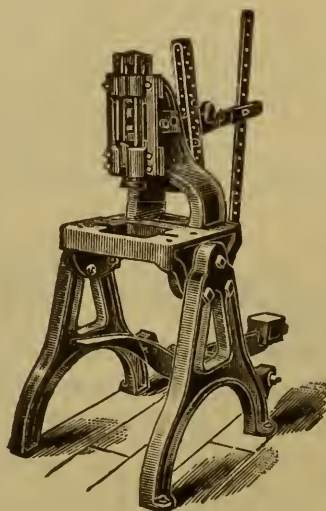
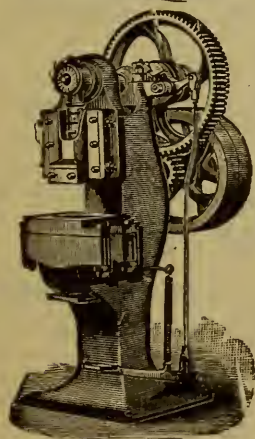
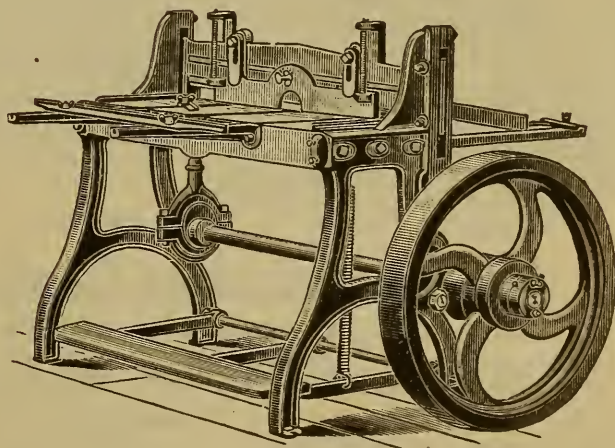
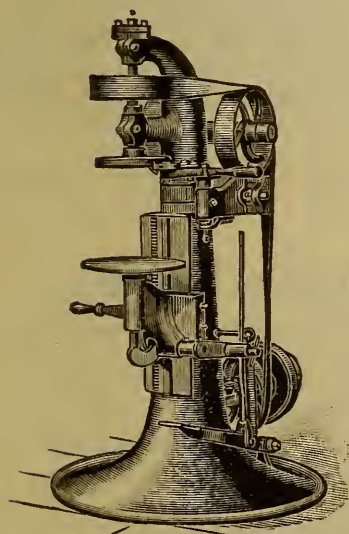
# **"NIAGARA"**

**Tinsmiths Tools and Machines.**

Best on the Market in



*WORKMANSHIP  
QUALITY  
AND  
FINISH*



Write for our complete Catalogue and Price List.

# PECORA ROOFING CEMENT.

SOLD IN PASTE FORM READY TO USE.

**ELASTIC DURABLE FIRE-PROOF**

## PRICES:

Barrels, 900 lbs.....	3c. per lb.
Half Barrels, 400 lbs. ....	3c. "
Buckets, 75 and 150 lbs.....	4c. "
Cans, 25, 10 and 5 lbs.....	5c. "

Discount . . . . .



## Stove Lining Indestructible Mortar.

For Laying and Facing Bridge Walls and Fire Brick:

For Lining Stoves and Ranges, Furnaces and Furnace Doors.

For Repairing Broken Fire Brick and Iron Linings.

## PRICES:

25-lb. Cans, 5 to a case .....	4c. per lb.
10 " " 18 " " .....	5c. "
5 " " 24 " " .....	5½c. "

Discount . . . . .



## Asbestos Furnace Cement (in Paste).

For Mounting Furnaces, Heaters, Stoves, etc., etc. For Cementing Joints exposed to intense heat.

Fireproof, acidproof, burns hard, indestructible, no cracking, odorless.

## PRICES:

25-lb. Cans, 6 to a case.....	4c. per lb.
20-lb. " 8 " " .....	4½c. "
10-lb. " 18 " " .....	5c. "
5-lb. " 24 " " .....	5½c. "
4-lb. " 40 " " .....	6c. "
3-lb. " 40 " " .....	7c. "
2-lb. " 50 " " .....	8c. "
1-lb. " 100 " " .....	9½c. "

Discount . . . . .



## Dixon's Silicia Graphite Paint

For Tin or Shingle Roofs and Iron Work, it is absolutely without an equal

Tin roofs well painted have not required repainting for 10 to 15 years.

## PRICES, THICK, GROUND IN OIL.

10 lbs. ....	15 cts per lb.	100 lbs.....	13 cts. per lb.
25 " .....	14 " "	450 lbs. (barrel).....	12 " "
50 " .....	13½ " "		

## PRICES, THINNED, READY MIXED.

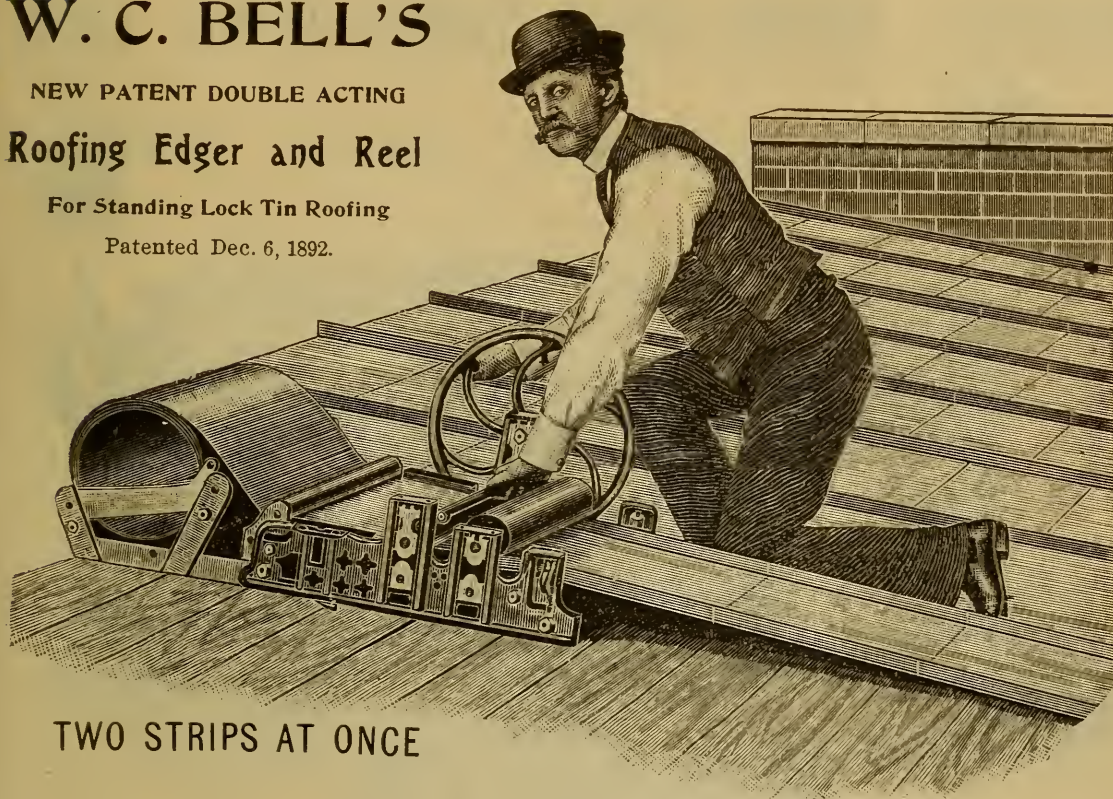
5 gals. ....	\$1.50 per gal.	25 gals.....	\$1 35 per gal.
10 " .....	1.40 " "	50 " .....	1 30 " "



**NEW PATENT DOUBLE ACTING**

## For Standing Lock Tin Roofing

Patented Dec. 6, 1892.



## TWO STRIPS AT ONCE

TWO SIZES ARE MADE FOR 20-INCH TIN AS FOLLOWS.

- Price of either the above sizes, without reel, . . . \$35. Discount 10 per cent.

Price of LAST YEAR'S EDGER, (Nos. 1 and 2.) . . . \$30. each, discount 10 per cent.  
 Price of Last Year's Edger WITH REEL, . . . \$35. discount 10 per cent.

**REELS FURNISHED FOR OLD MACHINES ON APPLICATION**

WHEN ORDERING PLEASE STATE THE GAUGE.

Colors,—Metallic Brown.

This Paint requires only about half as much oil to mix it for use as dry paint requires.

PRICES.	
In cans 25 pound, per pound.....	\$ .03 $\frac{1}{2}$
In kegs 100 " " ".....	.03 $\frac{1}{4}$
In barrels, per pound .....	.03

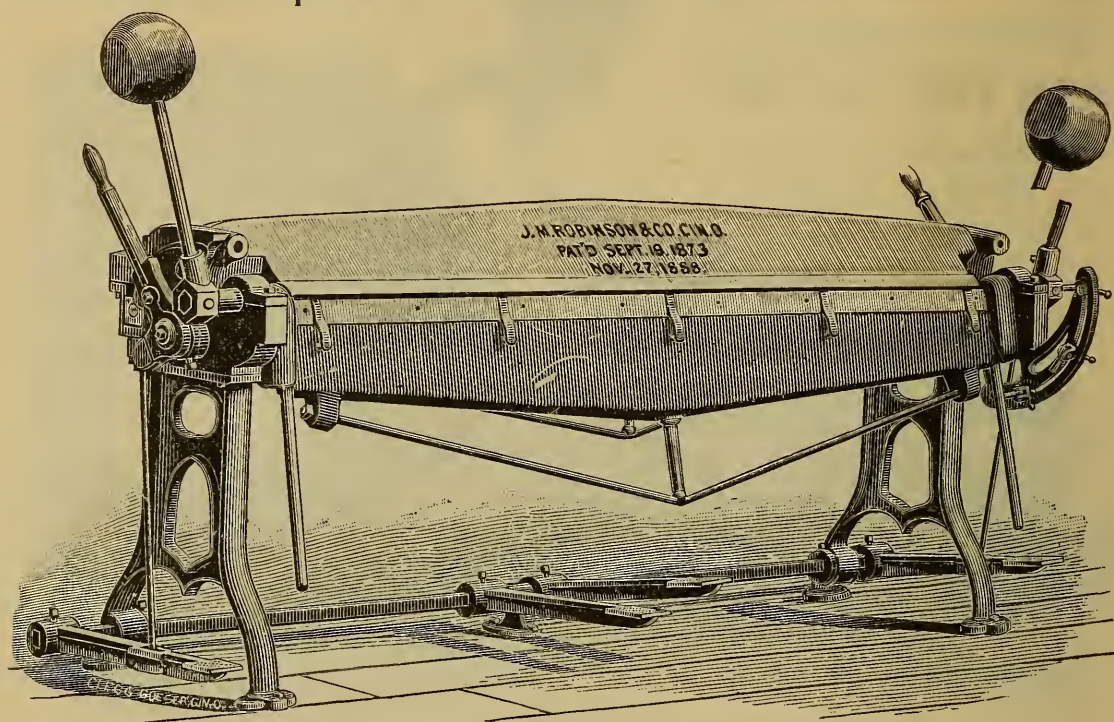
Used for Painting Iron and Tin Roofs, Factory, Farm and Railroad Buildings, Freight Cars, Bridges Fences and Iron Work of all kinds, exposed brick walls.

Per Keg, 100 pounds,.....	\$ .01 1/2
Per Barrel, 400 ".....	\$ .01 1/4
Per Ton.....	\$ .01





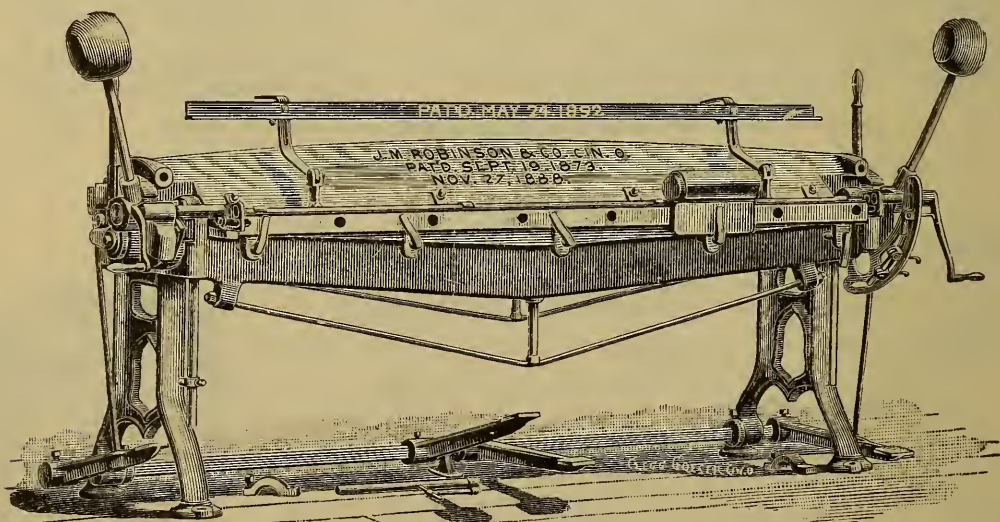
# Robinson's Improved Double Eccentric Cornice Brake.



## PRICE LIST. F. O. B. Cincinnati, Ohio.

Size.	Weight.	Length of Clamp.	Price.	Discount.
30 in.	475 pounds.	30½ inches	\$ 42.00	.....
36 "	585 "	37 "	56 00	.....
4 ft.	1000 "	51 "	87.50	.....
6 "	1800 "	75 "	120 00	.....
8 "	2800 "	97 "	180 00	.....
10 "	6800 "	121 "	325.00	.....

## Cornice Brake, With Beader and Gutter Former Attachment.

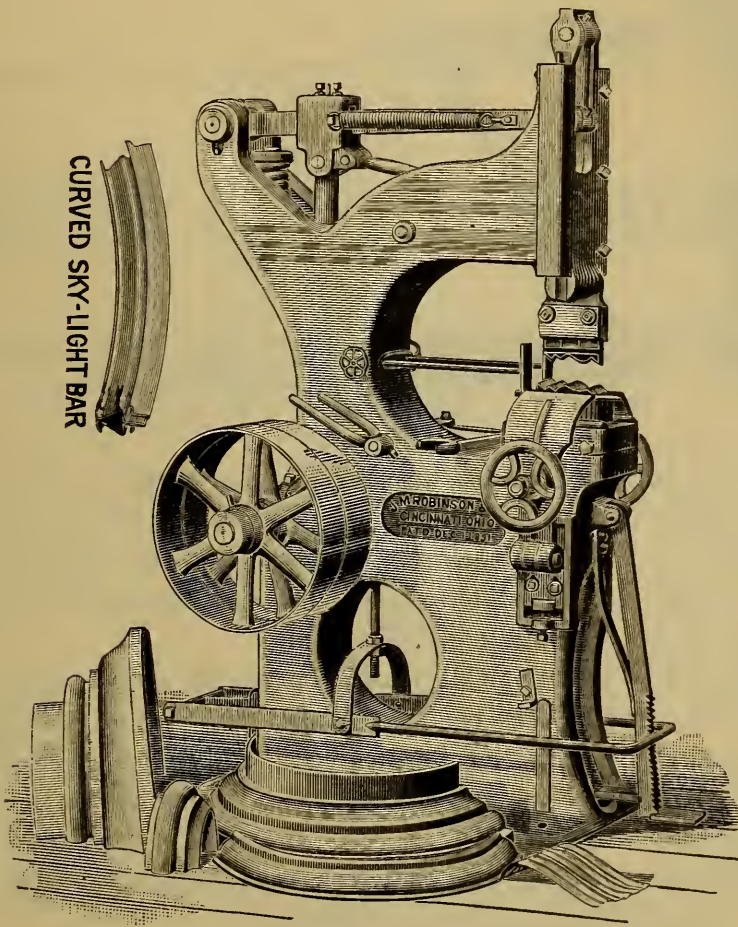


## Price of Beader and Gutter Former Attachment

	Price,		Discount
4-foot.....	\$30 00.....		.....
6 ".....	40 00.....		.....
8 ".....	45 00.....		.....
10 " for 8 foot brake.....	50 00.....		.....
10 " " 10 " ".....	75 00.....		.....

# ROBINSON'S Power Curved Moulding Machine.

*For the rapid formation of  
Curved Mouldings in Sheet Metal.*



The above cut illustrates the New and Improved Power Curved Moulding Machine. The cut was made from a photograph of the machine.

Speed about 300 to 400 strokes per minute.

Price of Power Curved Moulding Machine.....\$250.00

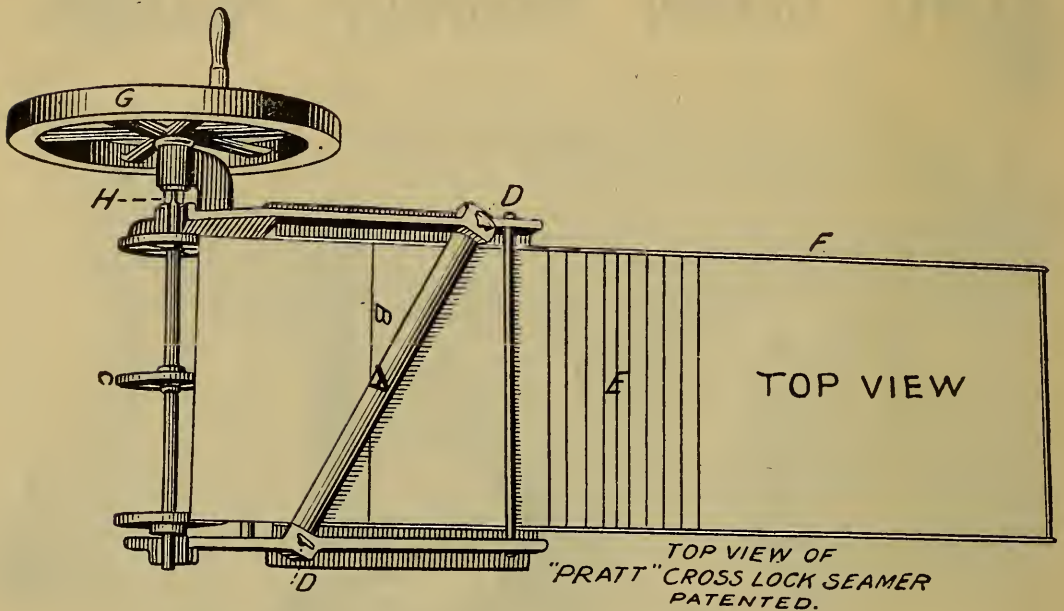
Shipping Weight, Crated .....1500 lbs.

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*For Further Information and Discounts, Please Correspond With Us.*



# "Pratt" Cross Lock Seamer.



This Machine is for locking sheets of tin together, and forming them into rolls of any desired length. Each Machine is furnished with a table "F." The Squeezing Rolls "A" are set diagonally so that but a small portion of the seam "D" is between the rolls at one time, making the machine easy to operate.

The 24" Fly Wheel "G" draws the sheets of tin "E" through the rolls and winds them on the Drum "C." The tension of the rolls is governed by the Set Screws "D." The Drum Shaft and Fly Wheel are strongly connected at "H."

The sheets of tin are first edged, and then placed consecutively on the table, so that each one draws the next during the operation of seaming. The table capacity is 28 sheets.

The operation is easy and perfectly noiseless. Six boxes of tin per hour can readily be put together on this machine with less labor than would be required in putting one box together with a mallet. We fully guarantee every machine to be as represented.

---

28" Machine. Locks 28" 20" and 14", Net \$  
 20" Machine. Locks 20" and 14",       "

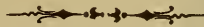


## O. W. BURRITT'S PATENT DOUBLE SEAMERS.

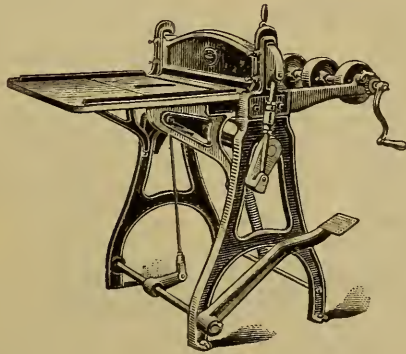
Common Gauge, follow 1 and 1¼ Tongs. Lock ¾ high.  
Wide Gauge, follow 1¼ and 1½ Tongs. Lock, 1 in. high.

*Price per Set, Two Pair, Wide Gauge, \$30; Common Gauge, \$30.*

SEND FOR DISCOUNT.



## NIAGARA CROSS LOCK SEAMER.



THIS Machine is intended for fastening together sheets of tin and rolling them up in strips, ready to lay on the roof. It is simple, rapid, easy to operate, and saves time and labor.

All parts of this Seamer are constructed with a view to strength and rigidity. The pressing bar is operated by a powerful toggle movement connected with foot treadle, and the seam produced at one depression of the treadle is perfectly tight and uniform the entire length.

Side gauges are provided on the drop table, and the sheet is held in proper position between the bar and bed by means of hinged fingers fastened to the pressing bar. These fingers move out of the way automatically when the bar is being depressed, and they drop down again when the bar goes up.

An eccentric attachment is applied to the pressing bar to raise the same sufficiently to allow the folded edge of the first sheet to pass through.

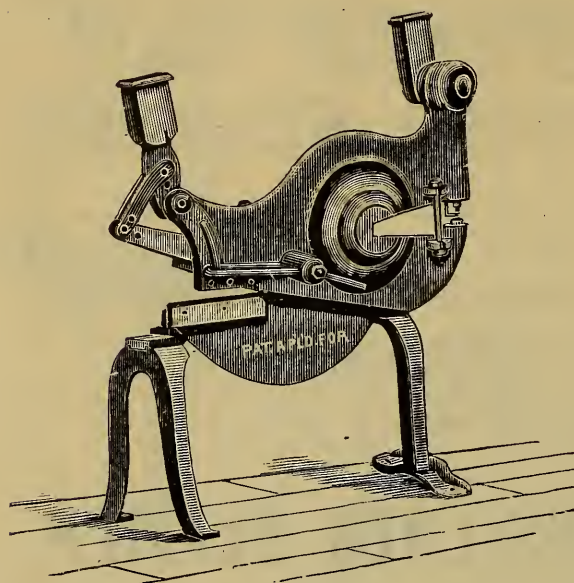
The reel in the rear of the machine is controlled by a ratchet and pawl, and the rolls of seamed tin can be removed without difficulty.

The drop table is hinged to the frame and supported by brackets. It can be dropped down easily so as to occupy the least possible space.

Working length, 28 inches.

**Price, with Reel and Drop Table, \$50.**

WRITE FOR DISCOUNT.



## IMPROVED, PATENTED COMBINED PUNCH AND SHEAR . . .

For sheet-iron workers, etc.

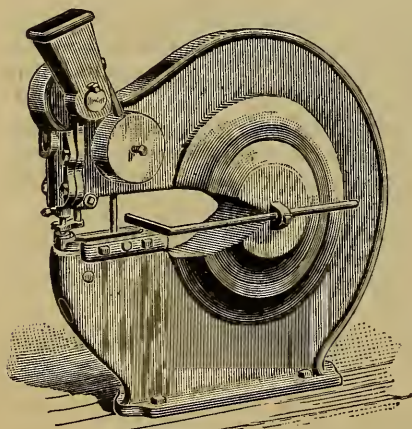
With the Punch are furnished three sets of punches and dies, back gauge, improved side pin gauge for punching holes of equal distance apart without marking off, and strengthening bolts for deep throat Punches.

No.	Throat.	Capacity.	Blade.	To Cut.	Bars.	Round	Weight.	Price.
2	4 inch	$\frac{1}{4}$ in $\frac{1}{4}$ inch	10-inch	No. 12	$\frac{1}{4}$ x 1	$\frac{3}{8}$	240	\$ 40 00
3	6-inch	5-16 in $\frac{1}{4}$ inch	10-inch	No. 10	$\frac{1}{4}$ x $1\frac{1}{2}$	$\frac{1}{2}$	300	45 00
4	10-inch	5-16 in $\frac{1}{4}$ inch	15-inch	No. 8	$\frac{3}{8}$ x 2	$\frac{5}{8}$	450	55 00
5	12-inch	5-16 in 5-16 inch	12-inch	No. 6	$\frac{3}{8}$ x 2	$\frac{5}{8}$	525	60 00
6	8-inch	$\frac{3}{8}$ in $\frac{3}{8}$ inch	12-inch	No. 6	$\frac{1}{2}$ x $2\frac{1}{2}$	$\frac{3}{4}$	640	70 00
8	12-inch	$\frac{3}{8}$ in $\frac{3}{8}$ inch	12-inch	$\frac{1}{4}$	$\frac{1}{2}$ x 3	$\frac{3}{4}$	800	80 00
10	18-inch	$\frac{1}{4}$ in $\frac{1}{4}$ inch	18-inch	No. 10.	$\frac{1}{2}$ x $2\frac{1}{2}$	$\frac{5}{8}$	1050	95 00
10 A	15-inch	$\frac{3}{8}$ in $\frac{3}{8}$ inch	15-inch	No. 6	$\frac{1}{2}$ x 3	$\frac{3}{4}$	1150	105 00
11	15-inch	$\frac{1}{2}$ in $\frac{1}{2}$ inch	12-inch	5-16	$\frac{3}{8}$ x $2\frac{1}{2}$	$\frac{7}{8}$	1200	115 00
11 B	12-inch	$\frac{3}{8}$ in $\frac{1}{2}$ inch	10-inch	5-16	$\frac{3}{8}$ x 3	$\frac{7}{8}$	1275	122 00

With strengthening bolts the No. 5 will punch  $\frac{3}{8}$  through  $\frac{3}{8}$  instead of 5-16 through 5-16. No. 8,  $\frac{1}{2}$  through  $\frac{3}{8}$ . No. 9,  $\frac{3}{8}$  through  $\frac{3}{8}$ . No. 9 A,  $\frac{1}{2}$  through  $\frac{3}{8}$ .

No. 9 made heavier to punch  $\frac{3}{8}$  through  $\frac{1}{4}$ . and cut No. 8 instead of No. 10, \$100.

No. 11 will be furnished with an extra top blade for trimming  $\frac{3}{8}$  plates. Nos. 2 and 3 with strengthening bolt on Shear for cutting heavier bars, \$1.00 extra. State size of punches and dies desired.



## GENERAL PURPOSE LEVER PUNCHES

Made for Power if Desired.

Especially adapted to Sheet-iron Workers, Boilermakers, Railingmakers, Carriage Shops, Wagon Shops, etc.

Throat.	Capacity.	Weight	Price.
4-inch	$\frac{3}{8}$ in $\frac{1}{4}$ inch	140	\$30 00
6-inch	$\frac{1}{2}$ in $\frac{3}{8}$ inch	275	38 50
10-inch	$\frac{3}{8}$ in $\frac{3}{8}$ inch	375	42 50
9-inch	$\frac{3}{8}$ in $\frac{1}{4}$ inch	225	37 50
12-inch	$\frac{1}{2}$ in $\frac{3}{8}$ inch	500	50 00
14-inch	$\frac{3}{8}$ in $\frac{1}{4}$ inch	425	45 00
15-inch	$\frac{1}{2}$ in $\frac{3}{8}$ inch	700	60 00
18-inch	$\frac{3}{8}$ in $\frac{1}{4}$ inch	650	55 00

Six and 9-inch are fitted for bench or post. Same on 4 and 10-inch, \$1.00 extra. Are extra heavy and guaranteed not to break. When ordering state the sizes of punches and dies.

## Buffalo Snips.

*With Straight Jaws and yet Adapted to Cutting Out Holes, Irregular Shapes, Scrolls, Etc.*

THE INNER faces of the jaws are shaped in such manner that the material can pass freely when the operator is cutting curves and irregular shapes. When cutting in the other direction, the lower jaw will allow the material to pass.

The above advantages are gained **without weakening the jaws** in the least. The **Buffalo Snips** are as strong and well adapted for regular work as the ordinary straight snips.

Any tinsmith will readily see that these are the cheapest Snips in the end, as they combine the advantages of Circle Snips with those of straight Snips.

The **Buffalo Snips** are finished in first-class manner, being forged out of the solid bar, with steel-laid jaws properly tempered.

No. 17, Buffalo Snips, 4-inch cut . . . . .	each, \$2 50
No. 18, Buffalo Snips, 3½-inch cut . . . . .	each, 2 00
No. 19, Buffalo Snips, 3-inch cut . . . . .	each, 1 50

WRITE FOR DISCOUNT.

## Niagara Snips or Hand Shears.

FORGED.

There are no better snips in the market than the "NIAGARA." The utmost care is taken in their manufacture. The blades are of the best steel; the handles are forged from the bar and will not break.



	Nos. 6½	7	8	9	10	
Will cut . . . . .	4½	4	3½	3	2½	inches.
Straight Snips . . . . . per pair,	\$3 00	\$2 50	\$2 00	\$1 50	\$1 40	
Circular Snips . . . . .	4 25	3 50	3 00	2 50	2 25	
Discount . . . . .						

The terms "Right and Left-hand Snips" are frequently misunderstood. Both kinds are used in the right hand. When held in the right hand, "Right-hand Snips" have the lower blade on the right side, and "Left-hand Snips" have it on the left side of the cutting line. The above cut shows "Left hand Snips" and these are always sent, unless ordered otherwise. We also supply snips for left-handed workmen at an extra charge of 50 cents net, per pair.

## MALLETS.

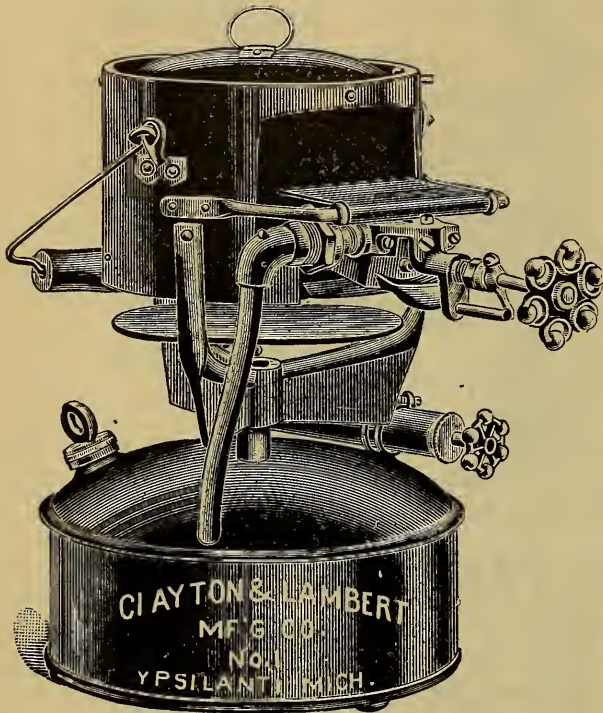
BEST SECOND GROWTH HICKORY.



2 inch face . . . . . Per dozen	3 inch face . . . . . Per dozen
2¼ " " . . . . . "	3½ " " . . . . . "
2½ " " . . . . . "	4 " " . . . . . "
2¾ " " . . . . . "	Assorted, 2 inch to 3 inch . . . . . "



## FIRE POTS.



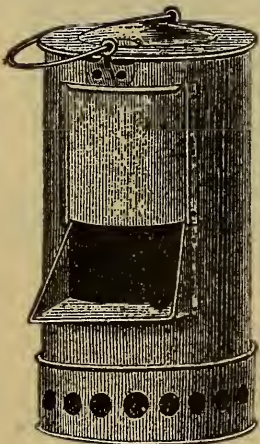
**ABSOLUTELY THE BEST FIRE POTS MADE.**

**NOTE THIS.**—Particular attention is called to the fact that with a No. 1 Fire Pot a kettle of solder or lead can be kept hot enough to wipe joints, and at the same time, without removing kettle from the fire, there is sufficient room and heat to keep soldering irons ready for use. In fact the No. 1 Fire Pot will heat all the metal and soldering coppers two men can use at the same time. **There is No Other Fire Pot Made that can do this.** Bear this in mind when purchasing a furnace.

**No. 1. Price Complete . . . . . \$6.00**

The cut will give you an idea of what "Our Special" is. In a word it is a No. 1 boiled down or concentrated, and is the best Fire Pot for its size that can be made.

**"Special." Price . . . . . \$4.50**



*Discount.....per cent.*

## SHEET-IRON FIRE POTS.

**Each . . . . . \$1.50**

*Discount.....per cent.*

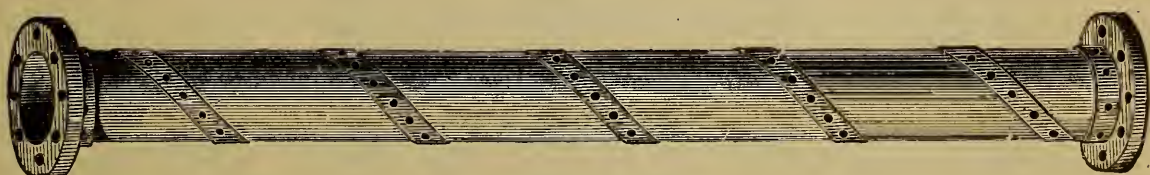
— AGENTS FOR —



**Unequaled in mechanical perfection and great strength.**

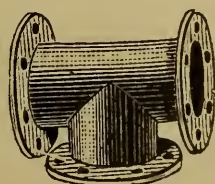
SPECIALLY ADAPTED FOR

Leader or Conductor Pipe,  
Ventilating and Blower Pipe,  
Exhaust Steam Heating,  
Pump Column and Suction Pipe.



Refrigerating Processes,  
Air Compressors, Water Mains,  
Hydraulic Mining,  
Irrigating Purposes, Etc.

WRITE FOR  
COMPLETE



CATALOGUE  
AND PRICES.



## LEAD WATER PIPES FOR HYDRANTS, PUMPS, &amp;c.

Calibre of Pipe	Weight per Rod and Foot	Aver'g length of Coils	Calibre of Pipe	Weight per Rod and Foot	Aver'g length of Coils	Calibre of Pipe	Weight per Foot	Aver'g length of Coils	Calibre of Pipe	Weight per Foot	Aver'g length of Coils
3/8 in.	7 lb. p. rod	100 ft.	5/8 in.	3 1/2 lb. per ft.	60 ft.	1 1/2 in.	3 1/2 lb.	45 ft.	3 1/2 in.	12 1/2 lb.	12 ft.
"	10 oz. per ft.	125 "	3/4 in.	16 lb. p. rod	100 "	"	4 1/4 lb.	40 "	"	15 lb.	12 "
"	1 lb.	125 "	"	1 1/4 lb. per ft.	80 "	"	5 lb.	42 "	"	18 1/2 lb.	12 "
"	1 1/4 lb.	100 "	"	1 1/2 lb.	75 "	"	6 1/2 lb.	32 "	"	22 lb.	12 "
"	1 1/2 lb.	85 "	"	1 3/4 lb.	65 "	"	8 lb.	25 "	4 in.	12 lb.	12 "
1/2 in.	9 lb. p. rod	150 "	"	2 lb.	65 "	1 3/4 in.	4 lb.	50 "	"	16 lb.	12 "
"	3 1/4 lb. per ft.	135 "	"	2 1/2 lb.	85 "	"	5 lb.	40 "	"	21 lb.	12 "
"	1 lb.	125 "	"	3 lb.	70 "	"	6 1/2 lb.	32 "	"	25 lb.	12 "
"	1 1/4 lb.	100 "	"	3 1/2 lb.	60 "	"	8 1/2 lb.	24 "	4 1/2 in.	14 lb.	12 "
"	1 1/2 lb.	140 "	"	4 1/2 lb.	45 "	2 in.	4 3/4 lb.	30 "	"	18 lb.	12 "
"	1 3/4 lb.	120 "	1 in.	2 3/4 lb. p. rod	65 "	"	6 lb.	35 "	5 in.	20 lb.	12 "
"	2 lb.	100 "	"	2 lb. per ft.	50 "	"	7 lb.	30 "	"	31 lb.	10 "
"	2 1/4 lb.	90 "	"	2 1/2 lb.	50 "	"	8 lb.	25 "	<b>Special Sizes to order.</b>		
"	2 1/2 lb.	85 "	"	3 1/4 lb.	65 "	"	9 lb.	23 "			
"	3 lb.	70 "	"	4 lb.	50 "	2 1/2 in.	8 lb.	12 "			
5/8 in.	14 lb. p. rod	125 "	1 1/4 in.	4 3/4 lb.	45 "	"	11 lb.	12 "			
"	1 lb. per ft.	85 "	"	2 lb.	50 "	"	14 lb.	12 "			
"	1 1/2 lb.	100 "	"	2 1/2 lb.	50 "	"	17 lb.	12 "			
"	2 lb.	95 "	"	3 lb.	45 "	3 in.	9 lb.	12 "			
"	2 1/4 lb.	85 "	"	3 3/4 lb.	55 "	"	12 lb.	12 "			
"	2 1/2 lb.	75 "	"	4 3/4 lb.	45 "	"	16 lb.	12 "			
"	3 lb.	70 "	"	6 lb.	35 "	"	20 lb.	12 "			

## LEAD SOIL PIPE.

1 1/2 inch, 2 1/4 lbs. per foot  
 2 " 3 lbs "  
 3 " 3 1/2 and 5 lbs. per foot.

4 inch, 6 and 8 lbs., per foot.  
 4 1/2 " 6 and 8 lbs., "  
 5 " 8, 10 and 12 lbs. "

## PURE BLOCK TIN PIPE.

3/16 Tin Pipe.	3/4 in. 10 and 12 oz.	per foot	1 1/2 in. 2 and 2 1/2 lb.	per foot
1/4 in. 4 oz and 6 oz.	1 " 15 and 18 oz.	"	2 " 3 lb.	"
3/8 " 5, 7 and 8 oz.	1 1/4 " 1 1/4 and 1 1/2 lbs.	"		
1/2 " 6, 8 and 10 oz.				
5/8 " 8 and 10 oz.				

## SHEET LEAD.

Approximate Thickness, 1-64, 1-43, 1-32, 1-25, 3-64, 1-16, 5-64, 3-32, 1/8, 1/4, inches.  
 Weight per square Foot, 1, 1 1/2, 2, 2 1/2, 3, 4, 5, 6, 8, 16 lbs.

EMBOSSSED AND COLORED TIN FOIL  
 COMPOSITION AND PURE TIN FOIL



For Electrotypers, Florists, Glass Embossing, Bottlers, Druggists,  
 Damp Walls, Confectioners, Chewing Gum and Tobacco Manufacturers

## BLOCK TIN SHEETS.

(Pure Rolled Tin.)

1/32" thick, not wider than 20", nor longer than 8 feet.  
 1/16" " " " " 30" " " " 8 "  
 1/8" " " " " 40" " " " 10 "

Heavier gauges rolled according to specifications.





## SHEET ZINC.

The Price for Nos. 9 to 15 gauge, by 32 in. to 46 in. wide, by 84 in to 90 in. long, is,

\$.....per 100 lbs. for 600 lb. casks

\$..... " " " 300 lb. "

\$..... " " " Loose Sheets

Prices for any other sizes and numbers will be named on application. All sheet zinc carried regularly in stock is 84 in. long. It is our constant effort to keep a COMPLETE stock of zinc, so that orders for many other gauges and widths than above specified, can be promptly filled. We do not sell assorted casks.

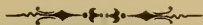


Table Showing Zinc Gauge as Compared with other Gauges.

ZINC GAUGE.			American or Brown & Sharpe.		Birmingham or Stubbs.		Old English From Brass Mfr's List.	
No.	SquareFoot in Lbs.	Thickness in Inches	No.	Thickness in Inches	No.	Thickness in Inches	No.	Thickness in Inches
3	.22	.006	33	.00708	34	.007	37	.0065
4	.30	.008	32	.00795	33	.008	36	.0075
.....	.....	.....	31	.008928	32	.009	35	.009
5	.37	.010	.....	.....	.....	.....	34	.0095
6	.45	.012	30	.010025	31	.010	33	.01025
.....	.....	.....	29	.011257	30	.012	32	.01125
7	.52	.014	28	.012641	29	.013	31	.01225
8	.60	.016	27	.014195	28	.014	30	.01375
.....	.....	.....	26	.01594	27	.016	29	.0155
9	.67	.018	.....	.....	.....	.....	28	.0165
10	.75	.020	25	.0179	26	.018	27	.01875
.....	.....	.....	24	.0201	25	.020	26	.0205
11	.90	.024	23	.022571	24	.022	25	.023
12	1 05	.028	22	.025347	23	.025	24	.025
.....	.....	.....	21	.02846	22	.028	23	.027
13	1 20	.032	.....	.....	.....	.....	22	.0295
14	1 35	.036	20	.03196	21	.032	21	.0315
15	1 50	.040	19	.03589	20	.035	20	.035
16	1 68	.045	18	.0403	19	.042	19	.040
17	1 87	.050	17	.04525	.....	.....	.....	.....
18	2 06	.055	16	.05082	18	.049	18	.049
19	2 25	.060	.....	.....	.....	.....	.....	.....
.....	.....	.....	15	.05706	17	.058	17	.058
20	2 62	.070	14	.06408	16	.065	16	.065
21	3 00	.080	13	.07196	15	.072	15	.072
22	3 37	.090	12	.08081	14	.083	14	.083
23	3 75	.100	11	.09074	13	.095	13	.095
24	4 70	.125	10	.10189	12	.109	12	.109
.....	.....	.....	9	.11443	11	.120	11	.120
.....	.....	.....	8	.12849	10	.134	10	.134
.....	.....	.....	7	.14428	9	.148	9	.148
.....	.....	.....	6	.16202	8	.165	8	.165
.....	.....	.....	5	.18194	7	.180	7	.180
.....	.....	.....	4	.20431	6	.203	6	.203
.....	.....	.....	3	.22942	5	.220	5	.220
.....	.....	.....	.....	.....	4	.238	4	.238
25	9 40	.250	2	.25763	3	.259	3	.259
.....	.....	.....	1	.2893	2	.284	2	.284
.....	.....	.....	.....	.....	1	.300	1	.300
26	14 00	.375	.....	.....	.....	.....	.....	.....
27	18 75	.500	.....	.....	.....	.....	.....	.....
28	37 50	1 000	.....	.....	.....	.....	.....	.....

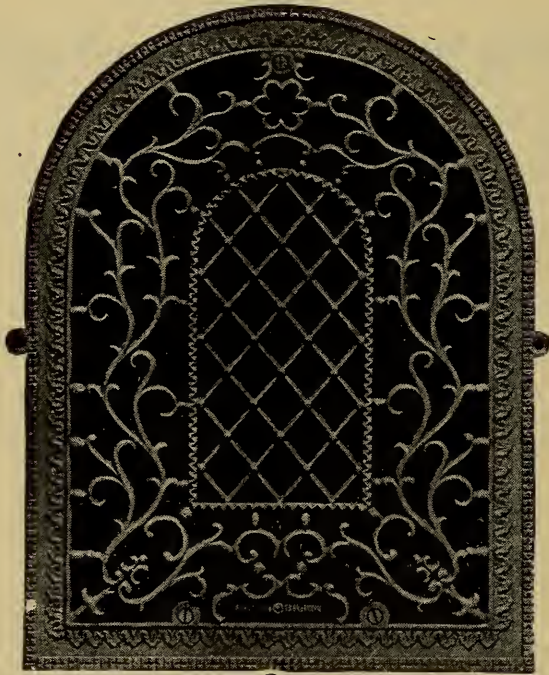
### Zinc Gauge Can be Maintained Only Approximately.

Prices on the following will be named on application. Rolled Zinc Battery Plates, which are furnished to order in a variety of thicknesses and sizes. Selected Sheets for Lithographers and Paper Makers use. Selected plates for Photo-Engravers and Etchers use. Bars for LeClanche Battery. Sheet Zinc Cut to Circles for stove boards and other purposes. Zinc cut to order.

# WARM AIR REGISTERS

. . . AND . . .

## VENTILATORS



**These Goods** are perfect in workmanship, finish and movement, and a sample order will convince you our claims are correct. We have ready for prompt shipment a large stock of ***Japanned Registers, Faces and Borders*** in our handsome American designs, and will take pleasure in promptly filling any orders with which you may favor us.

Our Registers and Borders are interchangeable with standard makes.



WRITE FOR OUR ILLUSTRATED CATALOGUE AND PRICES

We are Headquarters for Wire of every description.

# - - WIRE LIST - -

## Annealed, Bright, Bright Crimping, Nail, Galvanized and Coppered Wire.

Gauge, . . . . .	4 to 9	10-11	12
Price, per lb., . .	\$0.10	.11	.11½
Gauge, . . . . .	13-14	15-16	17 18
Price, per lb., . . .	\$0.12½	.14 .15	.16

### *In Bundles.*

## Stone or Weaving Wire.

Gauge, . . . . .	19	20	21	22	23	24
Price, per lb., . \$0.19	.20	.21	.22	.23	.24	
Gauge, . . . . .	25	26	27	28	29	30
Price, per lb., . \$0.25	.26	.28	.29	.30	.32	
Gauge, . . . . .	31	32	33	34	35	36
Price, per lb., . \$0.33	.35	.37	.40	.45	.55	
Gauge, . . . . .	37	38	39	40	41	42
Price, per lb., . \$0.40	.45	.50	.55	.60	.65	
Gauge, . . . . .	43	44	45	46	47	
Price, per lb., . \$0.75	.85	1.00	1.15	1.40		

### *In 12-pound Stones.*

## Tinned Broom Wire.

Gauge, . . . . .	18-20	21-22	23-24
Price, per lb., .	\$0.20	.21	.22

### *In 12-pound Stones.*

## Coppered Spring Wire.

Gauge, . . . . .	9 and coarser,	10-11	12
Price, per lb., .	\$0.10	.11	.11½
Gauge, . . . . .	13-14	15-16	17 18
Price, per lb., .	\$0.12½	.14 .15	.16

### *In Bundles.*

## Tinned Wire.

Gauge, . . . . .	3 to 9	10-11	12-14
Price, per lb., .	\$0.15	.16	.17
Gauge, . . . . .	15-16	17	18
Price, per lb., .	\$0.17½	.18	.18½
Gauge, . . . . .	19-20	21-22	23-24 25
Price, per lb., .	\$0.19	.20	.21 .22
Gauge, . . . . .	26	27	28 29 30 31
Price, per lb., .	\$0.23	.24 .25	.26 .27 .28
Gauge, . . . . .	32	33	34 35 36
Price, per lb., .	\$0.32	.33 .34	.40 .48

### *In 12-pound Stones.*

## Straightening and Cutting Wire.

Gauge, . . . . .	00 to 5	6 to 9	10-11
Price, per lb., .	\$0.01	.02	.03
Gauge, . . . . .	12 to 16	17 to 20	
Price, per lb., .	\$0.04	.05	
Cut into lengths, 20" and over per cent. disc.			
" " " 10" up to 20"			"
" " " 5" " 10"			"
" " " 5" & Smaller			"

WRITE FOR DISCOUNTS.

WEIGHT, STRENGTH AND SIZE OF WIRE.

Gauge	Diam.	Approximate Size	Length of 63 Lbs.	Length of 100 Lbs.	Length of 2000 Lbs.	Length of 1 Car-Load 20,000 lb.	Weight of 100 feet	Weight of 1 Mile	Tensile Strength	Gauge
	Inches	Inches.	Feet.	Feet.	Feet.	Miles.	Lbs.	Lbs.	Lbs.	
000	.362	3-8 in. scant	181	288	5,759	11	34.73	1,834	9,755	00
00	.331	11-32 in. scant	217	344	6,886	13	29.04	1,533	8,290	00
0	.307	5-16 in. scant	228	361	7,230	14	27.66	1,460	6,880	0
1	.283	9-32 in.	296	471	9,425	18	21.23	1,121	5,650	1
2	.263		343	545	10,905	21	18.34	968	4,930	2
3	.244	1-4 in. scant	399	634	12,674	24	15.78	833	4,250	3
4	.225	7-32 in. full	470	747	14,936	28	13.39	707	3,620	4
5	.207		555	881	17,621	33	11.35	599	3,040	5
6	.192	3-16 in. full	647	1,028	20,555	39	9.73	514	2,510	6
7	.177		759	1,205	24,096	46	8.30	439	2,220	7
8	.162	5-32 in. full	905	1,437	28,734	54	6.96	367	1,840	8
9	.148		1,086	1,724	34,483	65	5.80	306	1,560	9
10	.135		1,304	2,070	41,403	78	4.83	255	1,280	10
11	.120	1-8 in. scant	1,649	2,618	52,356	100	3.82	202	1,000	11
12	.105		2,158	3,425	68,493	130	2.92	154	800	12
13	.092	3-32 in.	2,813	4,464	89,286	169	2.24	118	568	13
14	.080		3,728	5,917	118,343	224	1.69	89	456	14
15	.072		4,598	7,299	145,983	277	1.37	72	352	15
16	.063	1-16 in.	6,000	9,524	190,476	360	1.05	55	264	16
17	.054		8,182	12,992	259,740	492	.77	41	208	17
18	.047		10,862	17,241	344,827	653	.58	31	160	18
19	.041		14,000	22,222	444,444	841	.45	24	128	19
20	.035	1-32 in. full	19,687	31,250	625,000	1,185	.32	17	104	20



## SUGGESTIONS TO TINNERS

Relating to Proper Sizes for

### Eave Trough and Conductor Pipes.



The rule for determining the relative sizes of Eave Troughs and Conductor Pipes requires a series of complex calculations, varying according to areas of roof and length of Trough. While the rule gives the theoretical results, it is better in practice to keep on the safe side, owing to the liability of the flow of water being obstructed by leaves and other accumulations, and of freezing during the winter season. We submit the subjoined table as a guide.

#### RELATIVE SIZES OF EAVE TROUGH AND CONDUCTOR PIPE.

3½	inch	Trough,	up to 12 feet	long ;	use 2 inch	Conductor	Pipe.		
3½	"	"	12 to 25	" "	" 3	"	"	"	"
4	"	"	25 to 35	" "	" 3	"	"	"	"
5	"	"	35 to 45	" "	" 4	"	"	"	"
6	"	"	45 to 55	" "	" 5	"	"	"	"
7	"	"	55 to 65	" "	" 6	"	"	"	"
8	"	"	65 to 75	" "	" 6	"	"	"	"

These dimensions can be varied in proportion to the area of roof. When a Trough is exposed to the North the intervals between Conductors should be reduced in length.



#### COMPARATIVE AREAS OF CONDUCTORS BASED ON FIVE INCH DIAMETER.

5 x 5 inch	Square	Conductor	Pipe ;	area	25	inches.
5 x 5 inch	Octogan	"	"	"	20½	"
5 inch	Plain	Round	"	"	19⅔	"
5 inch	Corrugated	Conductor	Pipe ;	area	16¾	inches.

Eave Trough Hangers should be placed from 3 feet to 3½ feet apart.

Conductor Fasteners should be placed from 3 to 6 feet apart, proportionate to the sizes of Conductor.

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Ship at once	Fadingness.
Write lowest price at which you will sell	Cemented.
Telegraph lowest price at which you will sell	Cementing.

[illegible]

Always specify **brand** wanted, and add the words "Waster" when such are required.

IC	14x 0	Dandelion.	IC	20x28	Dandiprat.
IX	14x20	Dandered.	IX	20x28	Dandruff.
IXX	14x20	Dandering.	IXX	20x28	Dandycock.
IXXX	14x20	Dandify.	IXXX	20x28	Dandyhen.
IXXXX	14x20	Daudifying.	IXXXX	20x28	Dandyism.

lbs. M. & Co. "extra fine" . . . . .	Maidens.
M. & Co. warranted $\frac{1}{2}$ and $\frac{1}{2}$ . . . . .	Maidenship.
"Standard" . . . . .	Mailroute.
M. & Co. "Extra quality" Wiping (in cakes) . . . . .	Mainland.

	14"	20"	28"
Prime IC, Painted . . . . .	Remark	Remit	Remove
Prime IX " . . . . .	Render	Renown	Repair
Wasters IC " . . . . .	Repeal	Repine	Replant
Wasters IX " . . . . .	Report	Reptile	Repute

If you want rolls Unpainted, add the word Resigned.

Bundles "Star" Brand, galvanized, No. —	Scrutineer.
" corrugated galvanized, No. —	Scrutinous
" B. B. black, No. —	Scrutiny.
" Merchant's cleaned black, No. —	Scufflers.
" refined black, No. —	Scullery.
" corrugated black, (painted both sides), No. —	Scullious.

Bundles	bright iron wire, No. —	Satiation.
"	annealed iron wire, " —	Satiety.
"	bessemer steel " " —	Satinets.
"	coppered iron " " —	Satinwood.
"	galvanized " " " —	Satire.
"	tinned " " " —	Satirical.
"	coppered steel, spring wire, No. —	Satirists.

Pounds "Iridium anti-friction"	Pounds "C" babbitt metal,	Maharajah.
metal Magnifier.	"D" " "	Mahoganies.
"Genuine" babbitt metal, Magnifying.	"E" " "	Mahogany.
"Superior" " "	"F" * " "	Maidenhair.
"A" " "	Stereotype metal	Maidenly.
"B" " "	Electrotype "	Maidenhood.

600 pounds casks zinc . . . . .	Satirized.
300 " " . . . . .	Satirizing.
Sheets of zinc . . . . .	Satisfier.





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